US EPA RECORDS CENTER REGION 5

EI DUPONT, EAST CON CAGO, INO 005 174 354 § 308 REP 2/13/91 & RESPONSES



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WCC-15J

APR 2 1 1992

# CERTIFIED MAIL P 679 172 265 RETURN RECEIPT REQUESTED

Mr. E. F. Hartstein Plant Manager E.I. DuPont 5215 Kennedy Avenue East Chicago, Indiana 46312

Re: Section 308 (Clean Water Act)

Information Request

E.I. DuPont de Nemours & Co., Inc.

NPDES Permit No. IN0000329 Docket No. V-W-91-308-11

Dear Mr. Hartstein:

This letter confirms the April 3, 1992, telephone conversation between Mr. James Novak of my staff and Mr. O. J. Meyer regarding the above referenced information request. They agreed that for the months of April and May 1992, seeps numbered 1, 2 and 3 need only be analyzed for five parameters: arsenic, cadmium, chromium, lead, and mercury.

Upon receipt of the above requested data for the months of April and May, no additional information will be required under this action. If you have any questions, please call Mr. Novak at (312) 886-0177.

Sincerely yours,

Dale S. Bryson

Director, Water Division .

cc: Joe Thomas, IDEM Lee Bridges, IDEM



LEGAL Wilmington, Delaware 19898

July 12, 1991

2000 d

<u>Certified Mail</u> Return Receipt Requested

Dale S. Bryson, Director Water Division, U.S. EPA Region V 5WCC-TUB-8 230 South Dearborn Street Chicago, Ill. 60604

Ro.

Section 308 Clean Water Act Information Request

Docket #V-W-91-308-11

June, 1991 Monthly Monitoring Report Du Pont East Chicago, Indiana Plant

Dear Mr. Bryson:

This is to confirm receipt of your letter of June 27, 1991 responding to concerns raised by Du Pont and agreeing to amend the above-referenced §308 Information Request as stated in that letter. We appreciate your favorable consideration of the points and will institute the new procedures in the future. We have some additional points to raise with you concerning this sampling program and will convey same to you under separate cover.

Enclosed with this letter is Du Pont's June, 1991 Monthly Monitoring Report for the (first) groundwater seep referenced in the original Information Request dated February 13, 1991.

Du Pont respectfully requests that the monthly monitoring report submission deadline be moved from the 15th of each month to the 1st of the following month. The laboratory we are utilizing for this program is having difficulty supplying both analytical results and quality control information within the 15-day period between the last week of sampling and the reporting deadline. Under the existing deadline, limited time is available for performing the data validation process and report preparation. Unless there is some reason for maintaining this schedule that we are overlooking, we request that the schedule be lengthened as set forth above.

Du Pont would also like to bring an additional concern to your attention. As of July 11, 1991, sampling has been performed on a weekly basis at the groundwater seep referenced in the February 13, 1991 §308 Request for a total of eighteen weeks. As evidenced by the monthly average results summarized in Table 2 of the attached report, only minor variations have been observed in constituent concentrations over the majority of this monitoring period. Sufficient data exists to establish baseline statistics for parameters being monitored and this information can be used to improve the efficiency of the monitoring and evaluation process.

The collection of additional weekly data will do little to better characterize seep quality. Instead, we propose that the frequency be switched from weekly to monthly and that changes in monthly water quality be monitored graphically through the use of charts showing baseline statistics for each constituent being monitored. The use of statistical charts for monitoring changes in groundwater quality over time and linking these to monitoring frequency is a widely accepted technique.

Using this monitoring and evaluation technique, observed concentrations are plotted on charts that allow for quick comparison to baseline constituent statistics. Each chart shows the mean, the mean +/- two standard deviations, and the mean +/- three standard deviations for a particular constituent. Attention is paid to observations exceeding these values and temporal trends. If observed constituent concentrations exceed the limits marked by the mean +/- three standard deviations, consideration is given to modifying sampling, monitoring, and evaluation process.

Du Pont would like to have a uniform reporting of sampling results on the 1st of the month and switch from weekly to monthly sampling at the first seep referenced in the February 13, 1991 §308 Request beginning in August, 1991. Your prompt response to these two requests would be deeply appreciated.

I apologize for not identifying the seeps by number as noted in your June 27th letter. It arrived after the June, 1991 report had been prepared, but future submittals will reference the seeps as you suggest.

By way of clarification, future submittals will normally be sent to you under the Plant Manager's signature/certification. However, when travel or other conflicts have the potential to interfere with meeting submittal deadlines, I will substitute for Mr. Hartstein, as in the case of this submittal. I hope there is no problem with this arrangement.

Pursuant to your instructions, Du Pont's certification of the June, 1991 report is attached hereto. If I can be of further help, please do not hesitate to call.

Very truly yours,

Norman D. Griffiths

Counsel

Environmental Law Group

cc: Assistant Commissioner for Water Management

**IDEM** 

105 South Meridian Street, P. O. Box 6015

Indianapolis, Indiana 46206-6015

E. F. Hartstein, East Chicago Plant Manager Attachments Est.Chicgo./13.

# CERTIFICATION OF DU PONT RESPONSES - JUNE, 1991 REPORT §308 Clean Water Act Information Request Du Pont East Chicago Plant

I, Norman D. Griffiths, Attorney in the Legal Department of E. I. du Pont de Nemours and Company ("Du Pont"), certify under penalty of law that the subject Report, submitted pursuant to an Information Request under §308 of the Clean Water Act, was prepared in accordance with a system designed to assure that qualified personnel (including an outside laboratory) properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information and should any subsequent information come to my attention that indicates that any portion of such information or data is false or incorrect, I will so notify the Water Division of the U. S. Environmental Protection Agency, Region V.

Date: 7/15/91

Norman D. Griffiths

Counsel

Environmental Law Group

STATE OF DELAWARE |

NEW CASTLE COUNTY |

Before me, Carol P. Hoffstein, this 15th day of July, 1991, personally appeared on behalf of E. I. du Pont de Nemours and Company, Norman D. Griffiths, Attorney, Du Pont Legal, and acknowledged the execution of the foregoing instrument.

(and P. Hoffstein)
Notary Public

My commission expires: 2/17/93

Est.Chcgo./13a.

June Monthly Monitoring Report for the Groundwater Seep at the Du Pont East Chicago Plant East Chicago, Indiana

Prepared by CH2M HILL on behalf of E.I. Du Pont de Nemours & Company

July 10, 1991

#### INTRODUCTION

In response to U.S. EPA's Section 308 Information Request dated February 13, 1991, Du Pont is submitting this monthly monitoring report characterizing the quality of the groundwater seep referenced in that request at Du Pont's East Chicago Plant. This report contains the results of the "monthly monitoring program" for June 1991.

#### SAMPLE COLLECTION AND ANALYSIS

Samples of the groundwater seep were collected on June 6, 13, 20, and 27, 1991. The flow rate of the seep averaged 1.25 gallons per minute (gpm) on June 6; 1.15 gpm on June 13; 0.88 gpm on June 20; and 0.18 gpm on June 27.

The June "monthly monitoring program" sampling activities consisted of obtaining a grab sample of seep water once per week. Seep flow rates were measured and recorded at each sampling interval. Sample fractions collected for oil and grease, total suspended solids, and pH analyses were not filtered. All other sample fractions were filtered.

After the samples were collected, filtered, and preserved, as appropriate, the samples were shipped via overnight courier to National Environmental Testing, Inc. (NET) analytical laboratory in Bartlett, Illinois. The samples collected on June 6 were analyzed for the following constituents specified in U.S. EPA's request: BOD-five day, COD, ammonia-N,

nitrate, nitrite, sulfate, chloride, fluoride, oil and grease, total dissolved solids, total suspended solids, arsenic, copper, zinc, and pH. The samples collected later in the month were analyzed for all of the constituents listed above, except BOD-five day, oil and grease, and copper. Du Pont received verbal approval from U.S. EPA to eliminate these three constituents from the monthly monitoring program prior to the collection of the seep sample during the second week of June.

For quality assurance/quality control (QA/QC) purposes, a duplicate sample was collected on June 6.

## ANALYTICAL RESULTS AND INTERPRETATION

Table 1 summarizes the analytical results of the "monthly monitoring program" for the seep during the month of June. The analytical results for the duplicate samples collected on June 6 are shown separated by a slash in the first data column of Table 1. All laboratory data sheets for the seep samples collected and analyzed during June for the "monthly monitoring program" are provided in Attachment 1. Attachment 2 contains a data validation summary of QA/QC information associated with the analysis of the June seep samples.

Seep constituents remained at relatively consistent levels during June with the following exceptions: ammonia-N, nitrate, and total suspended solids. Ammonia-N levels ranged from 0.46 to 2.56 mg/l; nitrate levels ranged from 0.08 to 3.46 mg/l; and total suspended solids

levels ranged from 7 to 71 mg/l.

Average parameter values for the three sets of complete monthly monitoring data (April, May, and June) are shown in Table 2.

TABLE 1

# CONSTITUENTS DETECTED IN SEEP WATER JUNE MONTHLY MONITORING PROGRAM JUNE 1991

Sample 1D:	DEC-SP1-G-1	DEC-SP1-6-2T	DEC-SP1-6-3	DEC-SP1-6-3	
Lab:	NET	NET	NET	NET	
Lab IO:	142472/	143057	143439	143833	
	142473				
Date:	6/6/91	6/13/91	6/20/91	6/27/91	
Filtered (Yes/No):	Yes	Yes	Yes	Yes	Average
AVERAGE FLOW RATE (gpm)	1.25	1.15	0.88	0.18	0.87
WATER QUALITY PARAMETERS (mg/l)					
BOO-Five Day	1/	NA	NA	NA	NC
COD	/13	29	26	29	23
Chloride	26/26	20	28	24	25
Oil and Grease	1*/1*	NA	NA	NA	NC
Fluoride	0.81/0.81	0.6	1.1	1.5	1.0
Nitrogen, Ammonia	0.56/2.56	0.46	0.60	1.03	0.91
Nitrogen, Nitrate	1.431/3.461	0.94	0.31	0.08	0.94
Nitrogen, Nitrite	1	0.04			0.01
Total Dissolved Solids	1360/1400	380	1410	1260	1110
Total Suspended Solids	11*/7*	8*	19*	71*	27*
Sulfate	870/840	490J	780J	850	740
pH (lab)	7.0*/7.1*	7.0*	6.9*	7.0*	7.0*
TRACE INORGANIC COMPOUNDS (mg/l)					
Arsenic	0.073/0.071	0.0340	0.0990	0.0650	0.068
Copper	1	NA	NA	NA	NC
Zinc	0.981/0.977	0.4548	0.6348	0.473B	0.635

#### Notes:

<sup>\*</sup> Sample fraction not filtered.

No value denotes not detected.

NA denotes not analyzed.

NC denotes not calculated (constituent eliminated from monthly monitoring program).

J denotes estimated value.

B denotes blank contamination.

A value of one-half the detection limit used in averaging not detected values. The average value of the duplicate sample results used in overall averaging.

TABLE 2 AVERAGE CONCENTRATIONS IN SEEP WATER MONTHLY MONITORING PROGRAM

	April	May	June
AVERAGE FLOW RATE (gpm)	0.78	0.86	0.87
WATER QUALITY PARAMETERS (mg/l)			
BOO-Five Day	2	2	NC
COD	14	15	23
Chloride	32	32	25
Oil and Grease	1*	1*	NC
Fluoride	1.0	1.2	1.0
Nitrogen, Ammonia	0.34	0.58	0.91
Nitrogen, Nitrate	0.47	1.3	0.94
Nitrogen, Nitrite			0.01
Total Dissolved Solids	1260	1400	1110
Total Suspended Solids	6*	6*	27*
Sulfate	760	840	740
pH (lab)	7.2*	7.1*	7.0*
TRACE INORGANIC COMPOUNDS (mg/l)			
Arsenic Copper	0.046	0.054	0.068 NC
Zinc	0.78	0.544	0.635

Notes: \* Sample fraction not filtered.

No value denotes not detected.

NC denotes not calculated (constituent eliminated from monthly monitoring program).

A value of one-half the detection limit used in averaging not detected values.

The average value of the duplicate sample results used in overall averaging.



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

700 S 8 700T

Ms. Susan Mulholland CH2M HILL 1890 Maple Ave Suite 200 Evanston, IL 60201 06/25/1991

Sample No.: 142472

Job No.: 91.1642

Sample Description:

DEC-SP1-G-1

CH128770.B0.SP; DuPont

Date Taken: 06/06/1991 Date Received: 06/07/1991
Time Taken: 09:00 Time Received: 09:30

BOD, Five Day	1.	mg/L
Chloride	26.	mg/L
COD, Total	<3.	mg/L
Fluoride	0.8	mg/L
N-Ammonia	0.56	mg/L
N-Nitrate	1.43	mg/L
N-Nitrite	<0.01	mg/L
Oil & Grease	1.	mg/L
Нд	7.0	units
Solids, Total Dissolved	1360.	mg/L
Solids, Total Suspended	11.	mg/L
Sulfate	870.	mg/L
Arsenic, AA	0.073	mg/L
Copper, ICP	K5004 Donks 050	mg/L

KeMy Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Ave Suite 200

06/25/1991

Sample No.: 142472

Job No.: 91.1642

Sample Description:

Evanston, IL 60201

DEC-SP1-G-1

CH128770.B0.SP; DuPont

Date Taken: 06/06/1991

Time Taken: 09:00

Date Received: 06/07/1991

Time Received: 09:30

Zinc, ICP

0.981

mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Ave Suite 200 Evanston, IL 60201 06/25/1991

Sample No.: 142473

Job No.: 91.1642

Sample Description:

DEC-FRSP1-G-1

CH128770.E0.SP; DuPont

BOD, Five Day		<1.	mg/L
Chloride		26.	mg/L
COD, Total		13.	mg/L
Fluoride		0.8	mg/L
N-Ammonia		2.56	mg/L
N-Nitrate		3.46	mg/L
N-Nitrite		<0.01	mg/L
Oil & Grease		1.	mg/L
Нд		7.1	units
Solids, Total Dissolved		1400.	mg/L
Solids, Total Suspended		7.	mg/L
Sulfate		840.	mg/L
Arsenic, AA		0.071	mg/L
Copper, ICP	V- 10	<0 x <sup>050</sup>	mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Ave

Suite 200

Evanston, IL 60201

06/25/1991

Sample No.: 142473

Job No.: 91.1642

Sample Description:

DEC-FRSP1-G-1

CH128770.B0.SP; DuPont

Date Taken: 06/06/1991 Time Taken: 09:00 Date Received: 06/07/1991

Time Received: 09:30

Zinc, ICP

0.977

mg/L

Kelly Jones
Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Ave

Suite 200

Evanston, IL 60201

07/01/1991

Sample No.: 143057

Job No.: 91.1772

Sample Description:

DEC-SP1-6-2T

CHI28770.BO.MS DuPont

Date Taken: 06/13/1991 Date Received: 06/14/1991

Time Taken: 12:00 Time Received: 10:45

Chloride	20.	mg/L
COD, Total	29.	mg/L
Fluoride	0.6	mg/L
N-Ammonia	0.46	mg/L
N-Nitrate	0.94	mg/L
N-Nitrite	0.04	mg/L
рН	7.0	units
Solids, Total Dissolved	380.	mg/L
Solids, Total Suspended	8.	mg/L
Sulfate	490.	mg/L
Arsenic, AA	0.0340	mg/L
Zinc, ICP	0.454	mg/L

Kelly Jones
Project Manager



06/20/1991

08:25

NET Midwest, Inc. Bartlett Division 850 West Bartlett Road Bartlett, IL 60103

Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Ave Suite 200 Evanston, IL 60201 07/03/1991

Sample No.: 143439

Date Received: 06/21/1991

Time Received: 09:00

Job No.: 91.1913

Sample Description:

Date Taken:

Time Taken:

DEC-SP1-6-3

CH128770.B0.MS; DuPont

Chloride	28.	mg/L
COD, Total	26.	mg/L
Fluoride	1.1	mg/L
N-Ammonia	0.60	mg/L
N-Nitrate	0.31	mg/L
N-Nitrite	<0.01	mg/L
рН	6.9	units
Solids, Total Dissolved	1410.	mg/L
Solids, Total Suspended	19.	mg/L
Sulfate	780.	mg/L
Arsenic, AA	0.0990	mg/L
Zinc, ICP	0.634	mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Av. Suite 200 Evanston, IL 60201 07/03/1991

Sample No.: 143833

Job No.: 91.2024

Sample Description:

DEC-SP1-6-3

CHI28770.BO.MS; DuPont

Date Taken: 06/27/1991 Time Taken: 13:22 Date Received: 06/28/1991

Time Received: 10:00

Chloride	24.	mg/L
COD, Total	29.	mg/L
Fluoride	1.5	mg/L
N-Ammonia	1.03	mg/L
N-Nitrate	0.08	mg/L
N-Nitrite	<0.01	mg/L
рН	7.0	units
Solids, Total Dissolved	1260.	mg/L
Solids, Total Suspended	71.	mg/L
Sulfate	850.	mg/L
Arsenic, AA	results by 7/12	mg/L
Zinc, AA	0.473	mg/L

Kelly Jones Project Manager

Page 1

PRELIMINARY REPORT

\* Verbal result

(0.0650 ngll)

received from
laboratory 7/10.

Final report to
follow germ

Attachment 2
Data Validation Summary
Monthly Monitoring Program

TO:

Pixie Newman/CHI

Susan Mulholland/CHI

FROM:

Dan MacGregor/GLO

DATE:

July 8, 1991

**SUBJECT:** Data Validation for Seep Samples

Du Pont East Chicago, Indiana

PROJECT: CHI28770.B0.MR

#### INTRODUCTION

This memorandum presents the data validation discussion for the inorganic analytical results for samples collected on June 6, 13, 20, and 27, 1991, at the Du Pont plant in East Chicago, Indiana. Seep sampling was performed in compliance with the U.S. EPA-requested "monthly monitoring program."

Seep samples were analyzed for major ions and selected metals by NET Laboratories in Bartlett, Illinois. Sample collection and transport were performed under strict chain-ofcustody procedures. Requested QA/QC data were limited to holding time data, chain-ofcustody forms, calibration and procedure blank results, initial calibration verification and standard recoveries, continuing calibration recovery results, sample duplicate results, matrix spike and matrix spike duplicate results, and laboratory spike results. The QA/QC and sample data were reviewed as described below.

#### **HOLDING TIMES**

Inspection of holding times for the inorganic analyses showed that all holding times were met.

#### CHAIN OF CUSTODY

The chain of custody forms were reviewed for accuracy and completeness. All necessary information was provided and found to be accurate. All requested analyses were performed, and the data packages were complete.

#### **BLANKS**

The calibration and procedure blank results were inspected for possible contaminants. Zinc was found in the June 13, 20, and 27 procedure blanks. Zinc results from these dates were qualified as blank contaminated "B." All other blanks were free of compound concentrations at levels equal to or greater than their reporting limits.

# INITIAL CALIBRATION VERIFICATION STANDARD RECOVERIES

The initial calibration verification standard recoveries were generally within control limits. Fluoride and nitrate recoveries from the June 6 sampling were above control limits, as was the zinc standard recovery from the June 13 sampling. The June 6 fluoride and nitrate sample results were qualified as "J," estimated. Due to the zinc result from the June 13 sampling date being previously qualified as blank contaminated, no further qualifying action was taken.

#### CONTINUING CALIBRATION RECOVERIES

Continuing calibration recoveries were found to be within control limits for all compounds.

#### LABORATORY CONTROL SPIKES

All laboratory spike recoveries were within control limits. No qualifying action was required.

#### MATRIX SPIKE/MATRIX SPIKE DUPLICATE FORTIFICATIONS

Generally the matrix spike and matrix spike duplicate results were within control limits. Nitrite from the June 6 sampling, and sulfate from the June 13 and 20 samplings were found to have high relative percent differences. The June 6 sampling contained no nitrite so no qualifying action for this compound was required. The sulfate results for the two above mentioned dates were qualified as estimated "J."

#### RESULTS

Duplicate samples (DEC-SP1-G-1 and DEC-FRSP1-G-1) were taken during the June 6th sampling event, these sample results compared well. The results from this round of sampling were compared, and found to be consistent, with data from previous sample events.

With the exception of previously noted qualifiers, all results were found to be complete and accurate.

#### CERTIFIED MAIL P 606 819 834 RETURN RECEIPT REQUESTED

Norman D. Griffiths, Esq. E.I. DuPont DeNemours & Co., Inc. Legal Department, Suite D-7007 1007 Market Street Wilmington, Delaware 19898

Re: Section 308 (Clean Water Act)

Information Request

E.I. DuPont DeNemours & Co., Inc.

NPDES Permit No. IN0000329 Docket No. V-W-91-308-11

Dear Mr. Griffiths:

This letter is to respond to DuPont's concerns and to amend the above referenced Information Request as follows:

- 1. Two additional seeps have been found since the initial request, and DuPont has initiated a sampling program similar to the "one-time" and "monthly" monitoring programs requested on the first seeps. We ask that you provide us with this data and continue the monthly monitoring for a period not to exceed one year.
- 2. DuPont suggested that single grab samples can be substituted for composite samples, as supported by Table 2, "Comparison of Composite Sample Analytical Results to Grab Sample Analytical Results." We concur, and 3A2 shall be revised to require "weekly grab samples comprising ... collected at regular intervals"....
- 3. DuPont suggested elimination of analyses for several parameters, we agree that analyses for some of these parameters can be eliminated for only the first seeps at this time. They are:

BOD - Five Day Oil and Grease Copper 3

After review of subsequent reports, additional parameters can be dropped. Further, upon review of data on the other seeps, similar screening can be done.

4. For clarification purposes, please assign an identification name to each seep (like seep 1, seep 2 and seep 3) and locate on the sketch previously provided. This can accompany your next submittal.

Finally, the March and May submittals were provided by Mr. E. F. Hartstein and the April submittal was provided by you. I assume that you are DuPont's designated contact consistent with your letter of February 21, 1991. Please note the reminder in our March 18, 1991, letter that any written statements submitted pursuant to the subject Request must be notarized and returned under an authorized signature certifying that all contents contained herein are true and accurate to the best of the signatory's knowledge and belief. (See last paragraph on page 5 of the Request).

If you have any questions, please contact Mr. James Novak at (312) 886-0177.

Sincerely yours,

SULLY T. CALIND

Dale S. Bryson Director, Water Division

cc: E.F. Hartstein, DuPont Mark Stanifer, IDEM

bcc: Tolpa, 5WCC
Melville, 5WG
Malek/Micke, 5HSM
Filippini/Mikulka, 5WCC
Mendoza, 5CA
308 File



# E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

DECENT

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SIN DALIS AND PIRMENTS DEPARTMENT

COMPLIANCE SECTION
June 13, 1991

Dale S. Bryson, Director
Water Division
United States Environmental Protection Agency
Region V (5WCC-TUB-8)
230 South Dearborn Street
Chicago, Illinois 60604

Subject: Section 308 (Clean Water Act)
Information Request

Attached is the May Monthly Monitoring Report for the ground-water seep covered in your section 308 information request (Dockut No. V-W-91-308-11).

Beginning with the June sample DuPont has replaced composite sampling with a single grab sample. As noted in the attached report everal constituents have consistently been at, below, or just slightly above their method detection limits. They are:

- o BOD-five day
- o COD
- o Oil and grease
- o Nitrite
- o Copper

Based on this information DuPont believes we should discontinue performing these analyses.

Based on a phone conversation today with Mr. Novak, it is our understanding that USEPA agrees to elimination of BOD-5 day, Oil and grease, and copper. It is our understanding that USEPA will reconsider elimination of other constituent analyses in the future when additional data are provided.

If you have any questions I may be reached at (219) 391-4601.

Sincerely,

E. F. Hartstein Plant Manager

EFH/pjp

Encl.

cc: Assistant Commissioner for Water Management

IDEM

105 South Meridian Street

P. O. Box 6015

Indianapolis, Indiana 46206-6015

## Certification of Du Pont Responses (3/14/91) - 308 Request for Information

I, Eugene F. Hartstein, Manager of Du Pont's East Chicago Plant, certify that the attached analytical results are correct and accurate to the best of my knowledge and belief. Should subsequent information come to my attention that indicates that any portion of tese datea are incorrect, I will so notify Region V.

Date:

E. F. Hartstein, Plant Manager Du Pont East Chicago Plant

STATE OF INDIANA)

LAKE COUNTY

Before me, Peggy J. Price, this 13 day of June ,1991, personally appeared E. I. du Pont de Nemours and Company by Eugene F. Hartstein, Plant Manager, Du Pont East Chicago Plant and acknowledged the execution of the foregoing instrument.

My commission expires: 3/17/93

LEGAL DEPARTMENT AND COMPANY  DU PONT BUILDING  ROOM 7007  WILMINGTON DE 19898  TO ALLE STON IL 60  TO ALL	<b>CHEM</b> HI	L TRANSMITI	TAL ,			/
Du font paulaing  Ream 7007  Numington DE 19898  IN MERINATUSEP PROJECT CHILD BY BY MRE  EAST CHILAGUSEP PROJECT CHILD BY BY BY MR  WE ARE SENDING YOU  ATTACHED UNDER SEPARATE COVER VIA SHOP DRAWINGS ROCCUMENTS TRACINGS PRINTS SPECIFICATIONS CATALOGS COPY OF LETTER  GUANTITY DESCRIPTION  MAY MONTHLY MONTHLY PROJECTIVE REPURT  MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE  MARKS	o E	I. Dufon	T DE NEMOURS	_ FROM	JUSAN MULHOLLA	WD/
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May Monthly Monitoring Report for the Groundwater Seep at the Du Pont East Chicago Plant East Chicago, Indiana

Prepared by CH2M HILL on behalf of E.I. Du Pont de Nemours & Company

June 12, 1991

#### INTRODUCTION

In response to U.S. EPA's Section 308 Information Request, Du Pont is submitting this monthly monitoring report characterizing the quality of the groundwater seep at Du Pont's East Chicago Plant. This report contains the results of the "monthly monitoring program" for May 1991 specified in U.S. EPA's request.

#### SAMPLE COLLECTION AND ANALYSIS

Samples of the groundwater seep were collected on May 2, 9, 16, 23, and 30, 1991. The flow rate of the seep averaged 0.48 gallons per minute (gpm) on May 2; 0.97 gpm on May 9; 0.78 gpm on May 16; 0.87 gpm on May 23; and 1.2 gpm on May 30.

The "monthly monitoring program" sampling activities consisted of obtaining an 8-hour composite sample of seep water collected at 0-, 4-, and 8-hour intervals, once per week. Seep flow rates were measured and recorded at each sampling interval. Sample fractions collected for oil and grease, total suspended solids, and pH analyses were not filtered. All other sample fractions were filtered.

After the samples were collected, filtered, and preserved, as appropriate, the samples were shipped via overnight courier to National Environmental Testing, Inc. (NET) analytical laboratory in Bartlett, Illinois. The samples were then analyzed for the following

constituents specified in U.S. EPA's request: BOD-five day, COD, ammonia-N, nitrate, nitrite, sulfate, chloride, fluoride, oil and grease, total dissolved solids, total suspended solids, arsenic, copper, zinc, and pH.

For quality assurance/quality control (QA/QC) purposes, a duplicate sample and a field blank were collected on May 2.

#### ANALYTICAL RESULTS AND INTERPRETATION

Table 1 summarizes the analytical results of the "monthly monitoring program" for the seep during the month of May. The analytical results for the duplicate samples collected on May 2 are shown separated by a slash in the first data column of Table 1. All laboratory data sheets for the seep samples collected and analyzed during May for the "monthly monitoring program" are provided in Attachment 1. Attachment 2 contains a data validation summary of QA/QC information associated with the analysis of the May seep samples.

Three of the constituents being monitored have concentrations consistently at or below method detection limits: oil and grease, nitrite, and copper. Reported concentrations for BOD-five day and COD were only slightly above their respective method detection limits in the "one-time monitoring program" sample collected on March 6, 1991, and have remained at these levels throughout the "monthly monitoring program."

The remaining constituents analyzed as part of the "monthly monitoring program" for the seep have remained at relatively consistent levels over the reporting period with the following exceptions: ammonia-N, nitrate, arsenic, and zinc. Ammonia-N levels have ranged from 0.41 to 0.75 mg/l; nitrate levels have ranged from 0.16 to 2.31 mg/l; arsenic levels have ranged from 0.015 to 0.085 mg/l; and zinc levels have ranged from 0.373 to 0.717 mg/l. As was the case in April, zinc concentration appears to increase with increases in seep flow rate.

Although minor variations have been observed from week to week, average parameter values for the two sets of complete monthly monitoring data (April and May) are very similar (Table 2).

TABLE 1

CONSTITUENTS DETECTED IN SEEP WATER
MAY MONTHLY MONITORING PROGRAM
MAY 1991

Sample ID: Lab:	DEC-SP1-5-1T NET	DEC-SP1-5-2T NET	DEC-SP1-5-3T NET	DEC-SP1-5-4T NET	DEC-SP1-5-5T NET	
Lab ID:	132290/ 132291	132803	137120	141634	141977	
Date:	5/2/91	5/9/91	5/16/91	5/23/91	5/30/91	
Filtered (Yes/No):	Yes	Yes	Yes	Yes	Yes	Average
AVERAGE FLOW RATE (gpm)	0.48	0.97	0.78	0.87	1.2	0.86
WATER QUALITY PARAMETERS (mg/l)						
BOO-Five Day	5/	2	2	2	3	2
COD	29J/59J	13		16		15
Chloride	16/32	38	28	42	26	2 15 32 1*
Oil and Grease	1*J/3*J	1*	1*J	2*B		1*
Fluoride	0.1/1.0	0.9J	2.8	0.7	0.9	1.2
Nitrogen, Ammonia	0.41/0.45	0.47	0.61	0.75	0.66	0.58
Nitrogen, Nitrate	0.16/0.18	1.12	2.31	2.22	0.71	1.3
Nitrogen, Nitrite	./					
Total Dissolved Solids	1370/1380	1420	1420	1400	1420	1400
Total Suspended Solids	4*/*	7*	11*	8*J	4*	6*
Sulfate	1120/930	830	790	770	<del>79</del> 0	840
pH (lab)	7.2*/7.2*	7.0*	7.0*	7.2*	7.1*	7.1*
TRACE INORGANIC COMPOUNDS (mg/l)						
Arsenic	0.0450/0.0460	0.052J	0.0710J	0.015	0.0850	0.054
Copper	1					
Zinc	0.4528/0.4658	0.676	0.373	0.496	0.717	0.544

Notes:

<sup>\*</sup> Sample fraction not filtered.

No value denotes not detected.

J denotes estimated value.

B denotes blank contamination.

A value of one-half the detection limit used in averaging not detected values. The average value of the duplicate sample results used in overall averaging.

TABLE 2 AVERAGE CONCENTRATIONS IN SEEP WATER MONTHLY MONITORING PROGRAM

	April	May
AVERAGE FLOW RATE (gpm)	0.78	0.86
WATER QUALITY PARAMETERS (mg/l)		
BOD-Five Day	2	2
COD .	14	15
Chloride	32	32
Oil and Grease	1*	1*
Fluoride	1.0	1.2
Nitrogen, Ammonia	0.34	0.58
Nitrogen, Nitrate	0.47	1.3
Nitrogen, Nitrite		
Total Dissolved Solids	1260	1400
Total Suspended Solids	6*	<b>6*</b>
Sulfate	760	840
pH (lab)	7.2*	7.1*
TRACE INORGANIC COMPOUNDS (mg/l)		
Arsenic	0.046	0.054
Copper		
Zinc	0.78	0.544

Notes: \* Sample fraction not filtered. No value denotes not detected.

A value of one-half the detection limit used in averaging not detected value. The average value of the duplicate sample results used in overall averaging.



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Ave.

Suite 200

Evanston, IL 60201

05/16/1991

Sample No.: 1

132290

Job No.:

91.0939

Sample Description:

DEC-SP1-5-1T

CH128770.BO.MS; DuPont

Date Taken: 05/02/1991

Time Taken: 08:00

Date Received: 0

05/03/1991

Time Received: 09:45

BOD, Five Day	5.
Chloride	16.
COD, Total	29.
Fluoride	0.1
N-Ammonia	0.41
N-Nitrate	0.16
N-Nitrite	<0.01
Oil & Grease	
рН	1. 7.2
Solids, Total Dissolved	1370.
Solids, Total Suspended	4.
Sulfate	1120.
Arsenic, AA	0.0450
Copper, ICP	<0.010
Zinc, ICP	0.452
	V.732

mg/L

Kelly Jones

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Ave.

Suite 200

Evanston, IL 60201

05/16/1991

Sample No.: 132291

Job No.: 91.0939

Sample Description: DEC-FRSP1-5-1T

CH128770.B0.MS; DuPont

Date Taken: 05/02/1991 Date Received: 05/03/1991

Time Taken: 08:00 Time Received: 09:45

BOD, Five Day <1. mg/L Chloride 32. mg/L COD, Total 59. mg/L Fluoride 1.0 mg/L N-Ammonia 0.45 mg/L N-Nitrate 0.18 mg/L N-Nitrite <0.01 mg/L Oil & Grease 3. mg/L 7.2 units Solids, Total Dissolved Solids, Total Suspended 1380. mg/L <1. mg/L Sulfate 930. mg/L Arsenic, AA Copper, ICP 0.0460 mg/L <0.010 mg/L Zinc, ICP 0.465 mg/L

lly Jones

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland CH2M HILL 1890 Maple Av. Suite 200 05/23/1991

Sample No.: 132803

Evanston, IL 60016

Job No.: 91.1095

Sample Description:

DEC-SP1-5-2T

CH28770.B0.MS; DuPont

Date Taken: 05/09/1991

Date Received: 05/10/1991

Time Taken: 16:00 Time Received: 10:00

BOD, Five Day		2.	mg/L
Chloride		38.	mg/L
COD, Total		13.	mg/L
Fluoride		0.9	mg/L
N-Ammonia		0.47	mg/L
N-Nitrate		1.12	mg/L
N-Nitrite		<0.01	mg/L
Oil & Grease		1.	mg/L
рН		7.0	units
Solids, Total Dissolved		1420.	mg/L
Solids, Total Suspended		7.	mg/L
Sulfate		830.	mg/L
Arsenic, AA		0.052	mg/L
Copper, AA	Ke00. Da	<0.050	mg/L
Zinc, AA	Kelly Jon	0.676	mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Avenue

Evanston, IL 60201

05/31/1991

Sample No.: 137120

Job No.: 91.1220

Sample Description:

DEC-SP1-5-3T; Composite

CH128776.30.MS; DuPont

Date Taken: Time Taken:

05/16/1991

Date Received:

05/17/1991

Time Received: 10:00

BOD, Five Day 2. Chloride 28. COD, Total <3. Fluoride 2.8 N-Ammonia 0.61 N-Nitrate 2.31 N-Nitrite <0.01 Oil & Grease 1. pН 7.0 Solids, Total Dissolved Solids, Total Suspended 1420. 11. Sulfate 790. Arsenic, AA 0.0710 Copper, AA <0.050 Zinc, AA 0.373

mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L mg/L

mg/L mg/L

mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Avenue

Suite 200

Evanston, IL 60201

06/11/1991

Sample No.: 141634

Job No.: 91.1396

Sample Description:

DEC-SP1-5-4T

CH128770.B0.3S; DuPont

Date Taken: 05/23/1991 Date Received: 05/24/1991

Time Taken: 08:00 Time Received: 09:45

BOD, Five Day 2. mg/L Chloride 42. mg/L COD, Total 16. mg/L Fluoride 0.7 mg/L N-Ammonia 0.75 mg/L N-Nitrate 2.22 mg/L N-Nitrite <0.01 mg/L Oil & Grease 2. mg/L pН 7.2 units Solids, Total Dissolved Solids, Total Suspended 1400. mg/L 8. mg/L Sulfate 770. mg/L Arsenic, AA 0.015 mg/L Copper, AA <0.050 mg/L Zinc, AA 0.496 mg/L

Kelly Jones

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Mr. Susan Mulholland

CH2M HILL

1890 Maple Avenue

Suite 200

Evanston, IL 60201

.06/11/1991

Sample No.: 141977

Job No.: 91.1492

Sample Description:

DEC-SP1-5-5T; Comp

CH128770.BO.MS; DuPont

Date Taken: 05/30/1991 Date Received: 05/31/1991

Time Taken: 10:00 Time Received: 10:00

BOD, Five Day	3.	mg/L
Chloride	26.	mg/L
COD, Total	<3.	mg/L
Fluoride	0.9	mg/L
N-Ammonia	0.66	mg/L
N-Nitrate	0.71	mg/L
N-Nitrite	<0.01	mg/L
Oil & Grease	<1.	mg/L
рН	7.1	units
Solids, Total Dissolved	1420.	mg/L
Solids, Totál Suspended	4.	mg/L
Sulfate	790.	mg/L
Arsenic, AA	0.0850	mg/L
Copper, AA	<0.050	mg/L
Zinc, AA	0.717	mg/L
•		

Kelly Jones Project Manager Attachment 2
Data Validation Summary
Monthly Monitoring Program

TO:

Pixie Newman

FROM:

Dan MacGregor/GLO

DATE:

June 12, 1991

SUBJECT:

Data Validation for Seep Samples

Du Pont East Chicago, Indiana

PROJECT: CHI28770.B0.MR

#### INTRODUCTION

This memorandum presents the data validation discussion for the inorganic analytical results for samples collected on May 2, 9, 16, 23, and 30, 1991, at the Du Pont plant in East Chicago, Indiana. Seep sampling was performed in compliance with the U.S. EPA-requested "monthly monitoring program."

Seep samples were analyzed for major ions and selected metals by NET Laboratories in Bartlett, Illinois. Sample collection and transport were performed under strict chain-of-custody procedures. Requested QA/QC data were limited to holding time data, chain-of-custody forms, calibration and procedure blank results, initial calibration verification and standard recoveries, continuing calibration recovery results, sample duplicate results, matrix spike and matrix spike duplicate results, and laboratory spike results. The QA/QC and sample data were reviewed as described below.

#### **HOLDING TIMES**

Inspection of holding times for the inorganic analyses showed that all holding times, with the exception of total suspended solids (TSS) from the May 23 sampling, were met. The TSS result from that date was qualified as estimated "J."

#### CHAIN OF CUSTODY

The chain of custody forms were reviewed for accuracy and completeness. All necessary information was provided and found to be accurate. All requested analyses were performed, and the data packages were complete.

## MEMORANDUM

Page 2 June 12, 1991 CHI28770.B0.MR

## **BLANKS**

A field blank was collected and analyzed as part of the May 2nd sampling event. The field blank contained low levels of BOD, chloride, COD, ammonia, nitrate, oil and grease, and total suspended and dissolved solids. The field blank water was a commercially available brand of distilled water. The quality of this water is unknown, thus making it inappropriate to qualify any data results based on this information. The field blank results demonstrate that any contamination that was occurring was of analytically insignificant proportion.

The calibration and procedure blank results were inspected for possible contaminants. All but two blanks were free of compound concentrations at levels equal to or greater than their reporting limits. Oil and grease contamination, at 2 ppm, was found in the May 23 procedure blank, and zinc at 0.037 ppm was found in the May 2 procedure blank. The oil and grease and zinc results from these dates were qualified as blank contaminated "B."

# INITIAL CALIBRATION VERIFICATION STANDARD RECOVERIES

The initial calibration verification standard recoveries were generally within control limits. The fluoride recovery from the May 9 sampling was above control limits, and the arsenic recovery from the May 16 sampling was below control limits. The sample results for these parameters for these sampling dates were qualified as "J," estimated.

#### CONTINUING CALIBRATION RECOVERIES

Continuing calibration recoveries were within control limits for all compounds except arsenic from the May 16 sampling and total COD from the May 2 sampling. Due to the arsenic result from this date being previously qualified as estimated, no further qualifying action was required for arsenic. The COD results from the May 2 sampling were qualified as estimated "J."

## LABORATORY CONTROL SPIKES

The oil and grease laboratory control spike recoveries were below control limits for the May 2, 16, and 23, sampling dates. The sample result for oil and grease from the May 23 sampling date had been previously qualified as blank contaminated, so this result required no further

qualifying action. The May 2 and 16 results were qualified as estimated "J." All other laboratory spike recoveries were within control limits.

# MATRIX SPIKE/MATRIX SPIKE DUPLICATE FORTIFICATIONS

Generally the matrix spike and matrix spike duplicate results were within control limits. Oil and grease from the May 16 sampling, arsenic from the May 9 sampling, and zinc from the May 2 sampling were outside control limits. Sample results for oil and grease and arsenic from their respective dates were qualified as estimated "J." The May 2 zinc results were previously qualified as blank contaminated, so no additional qualifiers for this compound were required.

# **RESULTS**

During the May 2 sampling event, duplicate composite samples (DEC-SP1-5-1T and DEC-FRSP1-5-1T) were taken. These sample results did not compare well. The duplicate sample results varied by as much as a factor of ten. The sample results associated with the site are typically very low. At these levels some variance should be expected. To further check sample precision, results from this month's sampling events were compared with previous seep results. In reviewing these results it was noted that the results from this round of sampling fell into the range of previous sample results, so no qualifying action due to poor sample precision was taken.

With the exception of previously noted qualifiers, all results were found to be complete and accurate.

CHI181/012.51



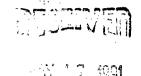
# E. I. DU PONT DE NEMOURS & COMPANY

#### EAST CHICAGO, INDIANA 46312

MEMICALS AND PIGMENTS DEPARTMENT

May 14, 1991

Dale S. Bryson, Director
Water Division
United States Environmental Protection Agency
Region V (5WCC-TUB-8)
230 South Dearborn Street
Chicago, Illinois 60604



Bonn Charle Cotion

Subject: Section 308 (Clean Water Act)
Information Request

Attached is the April Monthly Monitoring Report for the ground-water seep covered in your section 308 information request (Dockut No. V-W-91-308-11).

As noted in the attached report several constituents have consistently been at, below, or just slightly above their method detection limits. They are:

- o BOD-five day
- o COD
- o Oil and grease
- o Nitrate
- o Nitrite
- o Ammonia-N
- o Copper

Based on this information DuPont plans to discontinue performing these analyses beginning with the June, 1991 monthly sampling effort.

Also as noted in the attached report, we have observed little difference between the 8 hour composite sample and the 0 hour, 4 hour, and 8 hour grab samples, therefore, we will also substitute a single grab sample for a composite beginning with the June, 1991 monthly sampling effort.

If you have any problems with this approach please let me know on or before June 1.

Sincerely,

E F. Hartstein Plant Manager

EFH/pjp

Encl.

cc: Assistant Commissioner for Water Management IDEM

105 South Meridian Street

P. O. Box 6015

Indianapolis, Indiana 46206-6015

April Monthly Monitoring Report for the Groundwater Seep at the Du Pont East Chicago Plant East Chicago, Indiana

Prepared by CH2M HILL on behalf of E.I. Du Pont de Nemours & Company

May 10, 1991

#### INTRODUCTION

In response to U.S. EPA's Section 308 Information Request, Du Pont is submitting this monthly monitoring report characterizing the quality of the groundwater seep at Du Pont's East Chicago Plant. This report contains the results of the "monthly monitoring program" for April 1991 specified in U.S. EPA's request.

## SAMPLE COLLECTION AND ANALYSIS

Samples of the groundwater seep were obtained April 4, 11, 18, and 25, 1991. The flow rate of the seep averaged 0.32 gallons per minute (gpm) on April 4; 0.013 gpm on April 11; 1.57 gpm on April 18; and 1.12 gpm on April 25.

The "monthly monitoring program" sampling activities consisted of obtaining 8-hour composite samples of seep water collected at 0-, 4-, and 8-hour intervals. Seep flow rates were measured and recorded at each interval. Sample fractions collected for oil and grease, total suspended solids, and pH analyses were not filtered. All other sample fractions were filtered.

After the samples were collected, filtered, and preserved, as appropriate, the samples were shipped via overnight courier to National Environmental Testing, Inc. (NET) analytical laboratory in Bartlett, Illinois. The samples were then analyzed for the following

constituents specified in U.S. EPA's request: BOD-five day, COD, ammonia-N, nitrate and nitrite, sulfate, chloride, fluoride, oil and grease, total dissolved solids, total suspended solids, arsenic, copper, zinc, and pH.

For quality assurance/quality control (QA/QC) purposes, a duplicate sample was collected on April 4.

On April 4, grab samples were collected at each composite sampling interval to compare their analytical results to the composite sample analytical results.

# ANALYTICAL RESULTS AND INTERPRETATION

Tables 1 and 2 summarize the analytical results of the "monthly monitoring program" for the seep during the month of April. The analytical results for the duplicate samples collected on April 4 are shown separated by a slash in the first data column of Table 1. All laboratory data sheets for the seep samples collected and analyzed during April for the "monthly monitoring program" are provided in Attachment 1. Attachment 2 contains a data validation summary of QA/QC information associated with the analysis of the April seep samples.

Four of the constituents being monitored have concentrations consistently at or below method detection limits: BOD-five day, oil and grease, nitrite, and copper. Reported concentrations for COD, ammonia-N, and nitrate were only slightly above their respective method detection

limits in the "one-time monitoring program" sample collected on March 6, 1991, and have remained at these levels throughout the "monthly monitoring program."

The remaining constituents analyzed as part of the "monthly monitoring program" for the seep have remained at relatively consistent levels over this reporting period. The only exception was the zinc concentration which appears to be directly related to seep flow rate.

Table 2 contains the analytical results of the duplicate pair of composite samples and the three grab samples obtained on April 4. Analytical results for each grab sample obtained compare well with those for the composite samples.

Only one constituent in each grab sample was detected at a level greater than 50-percent different than either of the composite samples. In the 0-hour grab sample, total suspended solids was detected at a level greater than 50-percent higher than in either of the composite samples. In both the 4- and 8-hour grab samples, COD was not detected, whereas in the composite samples COD was detected at 46 and 33 mg/l.

## **CONCLUSIONS**

Based on the seep water analytical results obtained during March and April, it is recommended that the following constituents be eliminated from the "monthly monitoring program": BOD-five day, COD, nitrate, nitrite, ammonia-N, oil and grease, and copper.

Comparison of the analytical results for the grab samples and the composite samples obtained from the seep on April 4 supports the recommendation in the "March Monthly Monitoring Report" to switch to the collection of a grab sample instead of the 8-hour composite sample currently being collected.

The switch to grab sampling from composite sampling, and the elimination of laboratory analysis of the seven constituents recommended above, should be implemented as soon as possible.

TABLE 1

CONSTITUENTS DETECTED IN SEEP WATER
APRIL MONTHLY MONITORING PROGRAM
APRIL 1991

Sample ID: Lab: Lab ID:	DEC-SP1-4-1T NET 130113/	DEC-SP1-4-2T NET 130967	DEC-SP1-4-3T NET 131461	DEC-SP1-4-4T NET 131844	
Date:	130114 4/4/91	4/11/91	4/18/91	4/25/91	
Filtered (Yes/No):	Yes	Yes	Yes	Yes	Average
AVERAGE FLOW RATE (gpm)	0.32	0.13	1.57	1.12	0.78
WATER QUALITY PARAMETERS (mg/l)					
BOD-Five Day	4J/4J	1			2
COD .	461/331		13	3	14
Chloride	28/34	30	32	36	32
Oil and Grease	*/*	*	1*J	1*B	1*
Fluoride	1.6J/1.0J	0.7	1.0J	1.0	1.0
Nitrogen, Ammonia	0.28/0.26	0.26	0.39	0.42	0.34
Nitrogen, Nitrate	0.20/0.16	0.25	0.64	0.81	0.47
Nitrogen, Nitrite	,				
Total Dissolved Solids	1180J/1170J	1260	1240	1370	1260
Total Suspended Solids	6*/9*	4*	8*	3*	6*
Sulfate	700/740	740	810	790	760
pH (lab)	7.2*/7.2*	7.2*	7.2*	7.3*	7.2*
TRACE INORGANIC COMPOUNDS (mg/l)					
Arsenic Copper	0.030/0.028	0.0560	0.0451	0.052J	0.046
Zinc	0.452/0.443	0.388	1.26	1.03	0.78

#### Notes:

<sup>\*</sup> Sample fraction not filtered.

No value denotes not detected.

J denotes estimated value.

B denotes blank contamination.

A value of one-half the detection limit used in averaging not detected values. The average value of the duplicate sample results used in overall averaging.

TABLE 2 COMPARISON OF COMPOSITE SAMPLE ANALYTICAL RESULTS TO GRAB SAMPLE ANALYTICAL RESULTS

	Composite Sample	0-Hour Sample	4-Hour Sample	8-Hour Sample
Sample ID:	DEC-SP1-4-1T	DEC-SP1-4-1A	DEC-SP1-4-1B	DEC-SP1-4-1C
Lab:	NET	NET	NET	NET
Lab ID:	130113/ 130114	130115	130116	130117
Date:	4/4/91	4/4/91	4/4/91	4/4/91
Filtered (Yes/No):	Yes	Yes	Yes	Yes
FLOW RATE (gpm)	0.32 (avg)	0.20	0.46	0.30
WATER QUALITY PARAMETERS (mg/l)				
BOO-Five Day	4J/4J	5 J	5J	3J
COD	46J/33J	42J		
Chloride	28/34	26	28	30
Oils and Grease	*/*	*	*	*
Fluoride	1.6J/1.0J	1.0J	0.9J	0.9J
Nitrogen, Ammonia	0.28/0.26	0.19	0.24	0.31
Nitrogen, Nitrate	0.20/0.16	0.14	0.10	0.10
Nitrogen, Nitrite	1			
Total Dissolved Solids	1180J/1170J	1090J	1100J	1160J
Total Suspended Solids	6*/9*	27*	12*	6*
Sulfate	700/740	740	720	780
pH (lab)	7.2*/7.2*	7.3*	7.0*	7.2*
TRACE INORGANIC COMPOUNDS (mg/l)				
Arsenic Copper	0.030/0.028	0.019	0.027	0.045
Zinc	0.452/0.443	0.328	0.462	0.460

Notes: \* Sample fraction not filtered. No value denotes not detected. J denotes estimated value.



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60201

04/26/1991

Sample No.: 130113

Job No.: 91.0363

Sample Description:

DEC-SP1-4-1T

CHI28770.BO.SP; DuPont

Date Taken: 04/04/1991

Time Taken: 08:00

Date Received: 04/05/1991

Time Received: 09:50

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60201

04/26/1991

Sample No.: 130114

Job No.: 91.0363

Sample Description:

DEC-FRSP1-4-1T

CHI28770.BO.SP; DuPont

Date Taken: 04/04/1991

Time Taken: 08:00

Date Received: 04/05/1991

Time Received: 09:50

BOD, Five Day Chloride COD, Total Fluoride N-Ammonia N-Nitrate N-Nitrite Oil & Grease pH Solids, Total Dissolved Solids, Total Suspended Sulfate Arsenic, AA Copper, ICP Zinc, ICP	4. 34. 33. 1.0 0.26 0.16 <0.01 <1. 7.2 1170. 9. 740. 0.028 <0.050 0.443	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L
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relly Jones

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60201

04/26/1991

Sample No.:

130115

Job No.: 91.0363

Sample Description:

DEC-SP1-4-1A

CHI28770.BO.SP; DuPont

04/04/1991 Date Taken:

Time Taken: 09:41

04/05/1991 Date Received:

Time Received: 09:50

BOD, Five Day 5. Chloride 26. COD, Total 42. Fluoride 1.0 N-Ammonia 0.19 N-Nitrate 0.14 N-Nitrite <0.01 Oil & Grease <1. ηц 7.3 Solids, Total Dissolved Solids, Total Suspended 1090. 27. Sulfate 740. Arsenic, AA 0.019 Copper, ICP <0.050 Zinc, ICP 0.328

mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L mg/L

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mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60201

04/26/1991

Sample No.: 130116

Job No.: 91.0363

-

Sample Description:

DEC-SP1-4-1B

CHI28770.BO.SP; DuPont

Date Taken: 04/04/1991

Time Taken: 13:17

Date Received: 04/05/1991

Time Received: 09:50

mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L

> mg/L mg/L mg/L

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60201

04/26/1991

Sample No.:

130117

Job No.: 91.0363

Sample Description:

DEC-SP1-4-1C

CHI28770.BO.SP; DuPont

Date Taken: 04/04/1991

Time Taken: 17:54

Date Received:

04/05/1991

Time Received: 09:50

BOD, Five Day	3.
Chloride	30.
COD, Total	<3.
Fluoride	0.9
N-Ammonia	0.31
N-Nitrate	0.10
N-Nitrite	<0.01
Oil & Grease	<1.
PH	7.2
Solids, Total Dissolved	1160.
Solids, Total Suspended	6.
Sulfate	780.
Arsenic, AA	0.045
Copper, ICP	<0.050
Zinc, ICP	0.460

mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L mg/L mg/L mg/L

mg/L

Kelly Jones

Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Molholland

CH2M HILL

1890 Maple Av.

Suite 200

Evanston, IL 60016

04/26/1991

Sample No.:

130967

Job No.:

91.0526

Sample Description:

DEC-SP1-4-2T

CHI28770.B0.SP; DuPont

Date Taken: 04/11/1991

Time Taken: 17:00

Date Received: 04/12/1991

Time Received: 09:45

BOD, Five Day	1.
Chloride	30.
COD, Total	<3.
Fluoride	0.7
N-Ammonia	0.26
N-Nitrate	0.25
N-Nitrite	<0.01
Oil & Grease	<1.
рН	7.2
Solids, Total Dissolved	1260.
Solids, Total Suspended	4.
Sulfate	740.
Arsenic, AA	0.0560
Copper, ICP	<0.020
Zinc, ICP	0.388

mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L mg/L

mg/L mg/L

Elly Jones

Kelly Jones Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Avenue

Evanston, IL 60201

05/09/1991

Sample No.: 131461

Job No.: 91.0639

Sample Description:

DEC-SP1-04-3T

CH128770.B0.SP; DuPont

1.

8.

7.2

1240.

810.

Date Taken: 04/18/1991

Date Received:

04/19/1991 Time Taken: 00:00 Time Received: 09:40

BOD, Five Day <1. Chloride 32. COD, Total 13. Fluoride 1.0 N-Ammonia 0.39 N-Nitrate 0.64 N-Nitrite <0.01

Oil & Grease рН Solids, Total Dissolved Solids, Total Suspended Sulfate Arsenic, ICP

0.045 Copper, ICP <0.010 Zinc, ICP 1.26

mg/L

mg/L mg/L mg/L mg/L mg/L mg/L mg/L units mg/L mg/L mg/L mg/L

mg/L mg/L

KeTly Jones

Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Susan Mulholland

CH2M HILL

1890 Maple Avenue

Evanston, IL 60201

05/09/1991

Sample No.: 131844

Job No.: 91.0784

Sample Description:

DEC-SP1-4-4T; Comp. CH28770.B0.SP; DuPont

Date Taken: 04/25/1991

Time Taken: 08:00

Date Received: 04/26/1991

Time Received: 09:30

Kelly Jones Project Manager TO:

Pixie Newman/CHI

Susan Mulholland/CHI

FROM:

Dan MacGregor/GLO

DATE:

May 8, 1991

SUBJECT:

Data Validation for Seep Samples

Du Pont East Chicago, Indiana

PROJECT: CHI28770.B0.MR

#### INTRODUCTION

This memorandum presents the data validation discussion for the inorganic analytical results for samples collected on April 4, 11, 18 and 25, 1991, at the Du Pont plant in East Chicago, Indiana. Seep sampling was performed in compliance with the U.S. EPA-requested "monthly monitoring program."

Seep samples were analyzed for major ions and selected metals by NET Laboratories in Bartlett, Illinois. Sample collection and transport were performed under strict chain-ofcustody procedures. Requested QA/QC data were limited to holding time data, chain-ofcustody forms, calibration and procedure blank results, initial calibration verification and standard recoveries, continuing calibration recovery results, sample duplicate results, matrix spike and matrix spike duplicate results, and laboratory spike results. The QA/QC and sample data were reviewed as described below.

#### **HOLDING TIMES**

Inspection of holding times for the inorganic analyses showed that all holding times were met.

#### CHAIN OF CUSTODY

The chain of custody forms were reviewed for accuracy and completeness. All necessary information was provided and found to be accurate. All requested analyses were performed, and the data packages were complete.

## **BLANKS**

The calibration and procedure blank results were inspected for possible contaminants. Most blanks were free of compound concentrations at levels equal to or greater than their reporting limits. The procedure blank for the April 4 sample data contained 130 ppm of total dissolved solids (TDS). The TDS concentration in the blank is approximately one-tenth the average sample concentration. The blank TDS concentration was determined to be insignificant in comparison to the sample concentrations, and thus the sample TDS results were not qualified. Oil and grease contamination at 2 ppm was found in the April 25 calibration blank, so all oil and grease results from that date were qualified as "B," blank contaminated. The procedure blank for the April 11 sample data contained low levels of copper. The April 11 sampling did not detect copper, so no qualifying action was required.

# INITIAL CALIBRATION VERIFICATION AND STANDARD RECOVERIES

The initial calibration verification and standard recoveries were generally within control limits. Fluoride recoveries from the April 4 and 18 sampling were outside control limits. BOD recoveries from the April 4 and 25 samplings were below control limits. The sample results for these parameters for these sampling dates were qualified as "J," estimated.

#### CONTINUING CALIBRATION RECOVERIES

Continuing calibration recoveries were within control limits for all compounds except, fluoride from the April 18 sampling date. Fluoride recovery from that date was low, and so the fluoride result was qualified as "J."

#### LABORATORY SPIKES

The laboratory spike recoveries were below control limits for TDS (April 4) and oil and grease (April 18 and 25). The sample results for those parameters will be qualified as "J." All other laboratory spike recoveries were within control limits.

# MATRIX SPIKE/MATRIX SPIKE DUPLICATE FORTIFICATIONS

Generally the matrix spike and matrix spike duplicate results were within control limits. BOD and COD from the April 4 sampling were outside the control limits, as was arsenic from the April 18, and 25 sampling. Sample results for these parameters from these dates are qualified as estimated "J."

# **RESULTS**

During the April 4 sampling event, duplicate composite samples (DEC-SP1-4-1T and DEC-FRSP1-4-1T) were taken along with individual grab samples taken at specified times during the day (DEC-SP1-4-1A at 9:41, DEC-SP-1-4-1B at 13:17, and DEC-SP1-4-IC at 17:54). The individual grab samples compared well among themselves for all parameters except COD. The COD level was high in the initial sample, and then was less than the reporting limit in the next two samples. COD concentrations can vary greatly from sampling period to sampling period. The COD values associated with the site are typically very low. At these levels organic matter on glassware or from the atmosphere can cause variability in the results. The duplicate composite sample results compared closely with the grab sample results. Excluding the variability of the COD results, the difference in results from the two sampling plans are analytically insignificant. The results from this month's sampling events were compared with previous seep results, and the sample results compared well. With the exception of previously noted qualifiers, the results were found to be complete and accurate.

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE: MAR 2 9 1991

SUBJECT: Legal Support Sampling Inspection (LSI ) - E. I.

DuPont DeNemours and Company, Inc., East Chicago,

Indiana (IN0000329) (AFE137:D7)

FROM: Basim Dihu, Environmental Engineer

Central District Office (5SCDO)

To: Michael J. Mikulka, Chief Compliance Section (5WQC)

THRU: Willie H. Harris, Chief

Central District Office (5S CDO)

Acting on Mr. Dale S. Bryson, Director, Water Division's request dated December 18, 1990, the subject facility was visited on December 19, 1990. The purpose of the inspection, was to conduct a Priority One sampling inspection, of an unpermitted discharge from the E.I. DuPont de Nemours plant in East Chicago, Indiana.

#### REGULATORY REPRESENTATIVES

The regulatory representatives who participated in the inspection are listed below:

Name/Title	<u>Affiliation</u>	Telephone#
Ronald Kovach, Environmental Protection Specialist, Enforcement Unit I / Water Division	US EPA	(312) 886-1441
William Melville, Environmental Engineer Ground Water Protection Branch / Water Division	US EPA	(312) 886-1504
Skip Bunner Environmental Engineer Office of the Commission	IDEM er	(317) 232-8602
Basim Dihu Environmental Engineer ESD / CDO	US EPA	(312) 888-6242

#### PRIMARY SITE CONTACTS

Upon site arrival and during the inspections, credentials were presented to the appropriate facility personnel. Our primary site contacts are listed below:

O.J. (Jerry) Meyer, Senior Supervisor E.F. Harstein, Plant Manager, E.I. Dupont

#### FACILITY DESCRIPTION

The facility is involved in the manufacture of Colloidal Silica (LODUX), and sodium silicate. The plant SIC code is 2819 - General Inorganic Chemical. The plant operates three shifts, 5 days a week - 52 weeks a year and employs approximately 53 employees.

#### SAMPLING PROCEDURES

Mr. Ronald Kovach instructed me to take a grab sample from a standing pool of water (See Attached Photos). The surface water runoff to the Calumet River was very minimal. Only water drops were observed going to the river. A grab sample of 91CD01S01 was taken on December 19, 1990, at 12:35 pm. Reagent blank was also prepared at the site. The sample was preserved, kept on ice, and maintained under Chain-of-Custody until they were delivered to Central Regional Laboratory, U.S. EPA, Region V.

#### LABORATORY ANALYSIS

Due to sampling difficulty, Sample 91CD01S01 contained sludge-type material at the bottom of the sample bottle. The sample was split into two portions and extracted separately by two different techniques (water and sediment) by CRL. The samples were analyzed by GC/MS techniques. The water sample data are acceptable for use; but the sediment data are not acceptable for use since the laboratory failed to collect the data by the CRL standard quality assurance protocols.

The samples were extracted within seven days of collection, and analyzed within 40 days of extraction as required by the Clean Water Regulations (40 CFR Part 136 October 26, 1984). See the laboratory data sheets for more details.

#### SURVEY RESULTS

The results of the grab sample are presented on the attached data sheets. Other significant inspection findings are listed below:

- 1. As presented in the attached analytical data sheet, the sediment sample contained thirteen (13%) percent solids
- 2. As shown in the data sheets and listed below are four Tentatively Identified Compounds (TICS) which water sample:

Compound Name	RT(min.	Est. C	onc.
Unknown	3.2	11	J*
Unknown	19.08	16	J*
Unknown	22.04	21	J*
Unknown	24.6	160	J*

- (\*J) Estimated Value
- 3. As shown on the data sheets, compound (CAS No. 117-81-7) bis (2-Ethylhexy) Phthalate was found in both the sample and the blank sample.

If you have any question concerning this report, please contact me 886-6242.

Attachments

# E. I. DuPont DéNemours & Company

EAST CHICAGO , IN

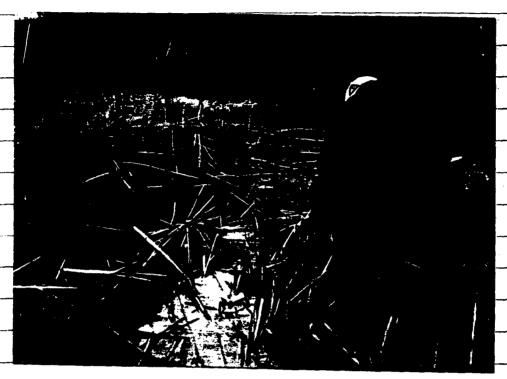


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AN Plotos were taken by William Melville Env. End., USEPA



PHOTO #2 - SAMPIING WERE TAKEN FROM THAT FOLKT

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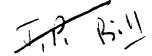
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Chicago, Il 1998 80604

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Comments:

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 CHICAGO, ILLINOIS

THE PROTECTOR	CHICAGO. ILLINOIS	·
DATE:	JAN 1 1 1991	
SUBJECT: FROM:	Review of Region 5 data for F. I. DURONT  Curtis Ross, Director Gruck & My  Region 5 Central Regional Laboratory	•
To:	Data User:	
Attached are	the results for:	
	the results for:  CRL Data Set Numbers: CDO 7506  Sample Numbers: F 9/CDO/So/  Parameter(s): /cTS  Laboratory: CRL	
	Parameter(s): /c TS_	***************************************
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	• For data acceptability requirements, refer to the method capability for the methods referenced.	statement
Comments t	y the Quality Control Coordinator:	
		RECEIVED
		.IAN 1 1 1991
	•	CENTRAL DISTRICT OFFICE
	If there are any questions regarding the data, refer them to David the Quality Control Coordinator, at 353-3805.	Payne,
Please sign	and date this form below and return it with any comments to:	
	Sylvia Griffin  Data Management Coordinator  Region 5 Central Regional Laboratory	JAN 18 1931
	(5SCRL)	CONTON

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ENVIPONMENTAL PHOTECTION AGENCY FOR THE TEAMS MINERALS-NUTRIENTS

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

CHICAGO, ALLINOIS

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Curtis Ross, Director Church Chiny	PONT E.CHICARI-IL
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For data acceptability requirements, refer to the for the methods referenced.	method capability statement
by the Quality Control Coordinator:	
If there are any questions regarding the data, refer the Quality Control Coordinator, at 353-3805.	them to Born-Botton Dovid A. Payne,
n and date this form below and return it with any sor	nments to:
Sylvia Griffin  Data Management Coordinator  Region 5 Central Regional Laboratory  (50081)	real By
	Review of Region 5 data for E. I. Dull Cartis Ross, Director Church & My Region 5 Central Regional Laboratory  Data User:  The results for:  CRI Data Set Numbers: CDC 7506 Sample Numbers: 910015018 Ro Parameter(s): ORGANICS - AL Laboratory: 550RL - ESD - USEPA  Thus:  (I) DATA ACCEPTABLE FOR USE for Al (I) DATA QUALIFIED AS TO USE (II) DATA UNACCEPTABLE FOR USE for Al 910D  For data acceptability requirements, refer to the for the methods referenced.  by the Quality Control Coordinator:  If there are any questions regarding the data, refer the Quality Control Coordinator:  And date this form below and return it with any cor Sylvia Griffin Data Management Coordinator

LAF 0143315

Date: February 23, 1991

To : Files

From : Babu Paruchuri, Chemist Baby

USEPA / ESD / 5SCRL

Re : E. I. DuPont - E. Chicago, IL

Dataset CDO7506 (AFE137:07) - Case Narrative

Two (2) low level water samples (91CD01S01 and -R01) from dataset CD07506 were submitted for acid base neutral (ABN) analysis by GC/MS utilizing EPA method 625NS.

Since the discharge sample (91CD01S01) contained sludge-type material at the bottom of the sample bottle, the sample was split into two portions and extracted seperately by two different techniques (water and soil). The samples were analyzed by GC/MS techniques. The water sample data are acceptable for use; the sludge data are not acceptable for use since the laboratory failed to collect the data by the CRL standard quality assurance protocols.

The site samples were extracted within seven days of collection and analyzed within 40 days of extraction as required by the Clean Water Act regulations ( 40 CFR Part 136 - October 26, 1984).

The samples were analyzed on 1/14/91. The GC/MS instrument met the EPA performance acceptance criteria for DFTPP; the initial calibration curve data of the standards met the EPA acceptance criteria.

The surrogate spike recovery data of the water samples were within the CRL QC acceptance criteria. Since the lab does not implement a sample clean-up procedure, the lab was unable to produce meaningful surrogate recovery data for the sludge, its matrix spike and matrix spike duplicate samples.

91CD01S01 was used for the matrix spike and matrix spike duplicate analysis. The matrix precision and accuracy ( P & A ) data for the sludge sample were not acceptable for use since the extracts were diluted out. The matrix precision data for the water sample were outside the QC acceptance criteria for four out of the 11 compounds and the accuracy data were outside the criteria (i.e., biased high) for five out of the 22 compounds. This does not effect the quality of the data since none of these compounds was detected at the site.

One method blank was extracted with the water samples. No TICs were reported. Bis(2-ethylhexyl)phthalate, considered as a lab contaminant, was detected in the method blank and site samples. Since the laboratory failed to collect method blank data properly for the sludge sample, the sludge sample data should be considered as unacceptable for use.

The site water samples were negative for acid, base and neutral target compounds but TICs were detected in the discharge sample.

The sludge portion of the discharge sample was polluted with several polynuclear aromatic hydrocarbons (PAHs) and non-aromatic hydrocarbons (e.g., oil). The sludge data should not be used for enforcement related activities for the following reasons:

- 1. The laboratory failed to properly analyze a soil method blank sample to demonstrate that the glassware, chemicals and other materials employed during the sample extraction and concentration procedures were free from the organic pollutants detected in the sludge sample.
- 2. Since the lab did not employ a sample extract clean-up procedure, the sludge, its matrix spike and matrix spike duplicate sample extracts had to be diluted to final volumes of 25. to 50. ml. to prevent the sludge sample from blocking the GC/MS auto sampler and resulting in collecting unacceptable GC/MS data. However, the higher dilution of the sludge extracts resulted in producing unusable QC data for matrix P & A study.

### QUALIFIERS

PLEASE SAVE THIS INFO FOR FUTURE USE THANK YOU

The seven EPA-defined qualifiers to be used are as follows:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture

and a 1 to 10 dilution factor, the sample quantitation limit for

phenol (330 V) would be corrected to:

(330 U) x df where D = 100 - X moisture

and df = dilution factor

at 24% moisture,  $D = \frac{100-24}{100} = 0.76$ 

(330 U) x 10 = 4300 U rounded to the appropriate number of significant figures

For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24Z moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 mg/ul in the final extract shall be confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

METHODBLANK

EPA SAMPLE NO.

Study Name: E. I. DuPONT E. CHICAGO IL AFE5SCRL

Code: CHICAGOIL Case No.: CD07506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER

Lab Sample ID: METHODBLANK

Sample wt/vol: 1000 (q/mL) ML

Lab File ID: >NF181

Level: (low/med) LOW

Date Received: 12/19/90

% Moisture: not dec. \_\_\_\_ dec. \_\_\_

Date Extracted 12/20/90=

Extraction: (Sepf/Cont/Sonc) SEFF

Date Analyzed: 1/14/91

GPC Cleanup: (Y/N) N

pH:NA

1.00000.TT Dilution Factor:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l		7	
1 100-95-2 111-44-4 75-57-8 541-73-1 100-46-7 100-51-6 95-50-1 95-48-7 196-44-5	Phenolbis(2-Chloroeth)2-Chlorophenol1,3-OichlorobenBenzyFalcohol1,2-Dichloroben2-Methylphenolbis(2-chloroiso	(ug/L or ug/Kg) ug/l  yl)Ether  zene  zene  propyl)ether_	2. 2. 2. 2. 2. 2. 3. 1. 3.	10   U   U   U   U   U   U   U	
67-72-1   98-95-3   78-59-1   88-75-5   105-67-9   65-85-0   111-91-1   120-83-2   120-82-1	N-Nitroso-Di-n- Hexachloroethand Hitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Benzoic acid bis(2-Chloroethenol)	nol oxy;methane nolbenzene	2. 3. 2. 2. 30. 3. 2.	U	
106-47-8   87-68-3   59-50-7   91-57-6   77-47-4   88-06-2   95-95-4   91-58-7   88-74-4   131-11-3   108-96-8	Naphthalene 4-Chloroaniline Hexachlorobutad 4-Chloro-3-methom 2-Methylnaphtha Hexachlorocyclorom 2,4,6-Trichlorom 2,4,5-Trichlorom 2-Chloronaphtha 2-Nitroaniline Dimethylphthala Acenaphthylene 2,6-Dinitrotolum	iene ylphenol lene pentadiene phenol phenol lene	2. 3. 2. 2. 2. 2. 2. 3. 2.	U	
·			<i>-</i> ·		

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METHODBLANK

EPA SAMPLE NO

Study Name: E. I. DuPONT E. CHICAGO IL AFE5SCRL

Code: CHICAGOIL Case No.: CD07506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER Lab Sample ID: METHODBLANK

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >NF181

Level: (low/med) LOW Date Received: 12/19/90

% Moisture: not dec. \_\_\_\_ dec. \_\_\_ Date Extracted:12/20/90

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/14/91

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

100-02-74-Nitrophenol	85-52-9	CAS NO.	COMPOUND		ATION UNI ug/Kg) u		Q	
87-86-5	87-86-5	99-09-2   85-52-9   51-28-5   100-02-7   132-04-9   121-14-2   84-66-2   7005-72-3   86-73-7   100-01-6   534-52-1   86-50-6   101-55-3   118-74-1	3-NitroanilinAcenaphthene2,4-DinitrophDibenzofuranDiethylphthalFluorene4-Nitroanilin4,6-Dinitro-2N-Nitrosodiph4-Bromophenyl	(ug/L or  ie  ienol  iluene late vi-phenylethe  ienylamine (1 i-phenylether  izene	ug/Kg) L	3. 2. 15. 2. 1. 1. 1. 2. 2.		
171-24-2Benzo(g,n,1)perylene		87-86-5   85-01-8   120-12-7   84-74-2   206-44-0   129-00-0   85-68-7   56-55-3   218-01-9   117-81-7   117-84-0   205-99-2   207-08-9   50-32-8   193-39-5	PentachlorophPhenanthreneAnthraceneBi-n-butylphtFluorantheneButylbenzylphBenzo(a)anthrChrysenebis(2-EthylheBenzo(b)fluorBenzo(k)fluorBenzo(k)fluorBenzo(a)pyrene	chalate	;e	2. 1. 3. 2. 2. 2. 4. 2. 2. 2. 2. 4. 3.	10 10 10 10 10 10 10 10 10 10 10 10 10 1	

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES[ ] NO[ ]

FORM 1 SV-2

1/87 Rev.

91CD01S01

EPA SAMPLE NU.

Study Name: E. I. DuPONT E. CHICAGO IL AFE5SCRL

ode: CHICAGOIL Case No.: CD07506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER

Lab Sample ID: 91CD01S01

Sample wt/vol: 960 (g/mL) ML

Lab File ID: >NF182

Level: (low/med) LOW

Date Received: 12/19/90

% Moisture: not dec. \_\_\_\_ dec. \_

Date Extracted:12/20790

Extraction: (Sepf/Cont/Sonc) SEPF

Date Analyzed: 1/14/91

GPC Cleanup: (Y/N) N

pH:NA

Dilution Factor: 1.00000

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/K		Q	
108-95-2	Fhenol	2.	   U	_
111-44-4	bis(2-Chloroethyl)Ether	2.	Ü	j
95-57-8	2-Chlorophenol	2.	iu -	1
541-73-1	1,3-Dichlorobenzene	2.	iu	i
106-46-7	1.4-Dichlorobenzene	2.	iu	7.1.30
100-51-6	Benzul alcohol	2.	Ü	i
95-50-1	Benzylfalcohol   1,2-Dichlorobenzene	3.	iU	i
95-48-7	2-Methulphenol	1.	iu	i
59658-52-9-	2-Methylphenol  bis(2-chloroisopropyl)ether_	3.	เบ	i
106-44-5	4-Methylphenol	1.	Ü	i
021-64-7	N-Nitroso-Di-n-propylamine	2.	ίŪ	i
67-72-1	Hexachloroetnane	2.	Ü	i
, 0   98-95-5	Nitrobenzene	3.	Ü	1
78-59-1	Isophorone	3.	Ü	
88-75-5	2-Nitrophenol	2.	ίŪ	
105-6/	2-Nitrophenol   2,4-Dimethylphenol   Benzoic acid	2.	Ü	i
05-85-0	Benzoic acid	31.	וֹט	i
, 111-91-1	bis(2-Chloroethoxy)methane	3.	ָ ֖֖֓֞֝֝֝ ֖֓֞	i
120-83-2	2,4-Dichlorophenol	2.	Ü	ì
120-82-1	1,2,4-Trichlorobenzene	2.	Ü	1
	Naphthalene	2.	ไป	i
106-42-8	4-Chloroaniline	2.	ΙÜ	i
1 87-68-3	Hexachlorobutadiene	ž. 3.	เบ	i
59-50-7	4-Chloro-3-methylphenol	2.	ίŬ	i
1 91-57-6	2-Methylnaphthalene	2.	ĺÜ	1
77-47-4	Hexachlorocyclopentadiene	2.	Ü	i
88-06-2	2,4,6-Trichlorophenol	2.	Ü	i
95-95-4	2,4,5-Trichlorophenol	2.	Ü	i
91-58-7	2-Chloronaphthalene	2.	เป็	i
88-74-4	2-Nitroaniline	3.	ίŪ	i
131-11-3	Dimethylphthalate	2.	ΙÜ	i
208-96-8	Acenaphthylene	2.	lU	1
1 606-20-2	2,6-Dinitrotoluene	1.	10	1
i	1 go billiol ocolucine	<b>.</b> .	i	l I
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(1) - Cannot be separated from Diphenylamine
TENTATIVELY IDENTIFIED COMPOUNDS YEST NOT T

84-74-2-----Di-n-butylphtnalate\_\_\_\_

| 85-68-7-----Butylbenzylphthalate\_\_\_\_\_|

56-55-3-----Benzo(a)anthracene\_\_\_\_

| 117-84-0-----Di-n-octylphthalate\_\_\_\_

117-81-7-----bis(2-Ethylhexyl)phthalate\_\_\_|

205-99-2----Benzo(b)fluoranthene\_\_\_\_\_

207-08-9-----Benzo(k)fluoranthene\_\_\_\_\_

53-70-3-----Dibenzo(a,h)anthracene\_\_\_\_\_

| 193-39-5----Indeno(1,2,3-cd)pyrene\_\_\_\_\_|

| 191-24-2----Benzo(g,h,i)perylene\_\_\_\_|

206-44-0-----Fluoranthene\_\_\_\_

I 129-00-0-----Pyrene

218-01-9-----Chrysene 👱

1 50-32-8-----Benzo(a)pyrene\_

FORM I SV-2

1/87 Reu.

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#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET IDENTIFIED COMPOUNDS TENTATIVEL

91CD01501

EPA SHMPLE

Study Name:E. I. DuPONT E. CHICAGO IL A 5SCRL

ode: CHICAGOIL Case No.: CD07506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER

Lab Sample ID: 91CD01S01

Sample wt/vol:

960

(g/mL) ML

Lab File ID: >NF182

Level: (low/med) LOW

Date Received: 12/19/90

% Moisture: not dec.\_\_\_\_

Number TICs found:

dec. \_\_\_

Date Extracted 12/20/90

Extraction: (Sepf/Cont/Sonc) SEPF

Date Analyzed: 1/14/91

GPC Cleanup: (Y/N) N

pH:NA

Dilution Factor:

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

		e or ograg,	-3	
CAS HUMBER	COMPOUND NAME	RT     RT	EST. CONC.	0
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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

91CD01R01

Study Name: E. I. DuPONT E. CHICAGO IL AFESSCRL

Lab Code: CHICAGOIL Case No.: CDO7506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER

Lab Sample ID: 91CD01R01

Sample wt/vol: 1050 (g/mL) ML Lab File ID: >NF183

Level: (low/med) LOW

Date Received: 12/19/90

% Moisture: not dec. \_\_\_\_ dec. \_\_\_

Date Extracted: 12/20/90

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/14/91

GPC Cleanup: (Y/N) N pH:NA

Dilution Factor: 1.00000

		CONCENTRATION U	NITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q	
		]		1	—: —!
108-95-2			2.	ĮŬ	1
111-44-4	bis(2-Chloroethyl	)Ether	1.	ĮŪ	1
95-57-8	2-Chlorophenol		2.	U	1
541-73-1	1,3-Dichlorobenze	ne	2.	וט	ì
106-46-7	1,4-Dichlorobenze	ne	2.	U	į
100-51-6	Benzyl alcohol		2.	Įΰ	1 2
95-50-1	1,2-Dichlorobenze	nel	2.	IU	1
95-48-7	2-Methylphenol		1.	Įΰ	1
39638-32-9	bis(2-chloroisopr	opyl)ether_	2.	Įΰ	1
106-44-5	4-Methylphenol	l	1.	IU	1 -
621-64-7	N-Nitroso-Di-n-pr	opvlamine !	1.	U	1
67-72-1	Hexachloroethane_		2.	וטן	1
98-95-3	Nitrobenzene	1	2.	ប្រ	1
78-59-1	Isophorone		2.	U	j
88-75-5	2-Nitrophenol	•	2.	U	i
105-67-9	2,4-Dimethylpheno	1 !	2.	Ü	i
65-85-0	Benzoic acid		29.	Ü	i
111-91-1	bis(2-Chloroethox	v)methane	2.	ĺΰ	i.
120-83-2	2,4-Dichloropheno	11	2.	JU	i
120-82-1	1,2,4-Trichlorobe	nzene	2.	U	
91-20-3	Naphthalene	<u> </u>	2.	ĮŪ	1.
106-47-8	4-Chloroaniline		2.	ĮŪ	i
87-68-3	Hexachlorobutadie	ne!	2.	ĮŪ	1
59-50-7	4-Chloro-3-methyl	phenol	1.	IU	i
91-57-6	2-Methylnaphthale	ne	2.	ΙŪ	1
77-47-4	Hexachlorocyclope	ntadiene	2.	U	ĺ
88-06-2	2,4,6-Trichloroph	enol	1.	Įΰ	i
95-95-4	2,4,5-Trichloroph	enol I	1.	ĺυ	i
91-58-7	2-Chloronaphthale	ne l	1.	įυ	i
68-74-4	2-Nitroaniline		2.	įΰ	i
131-11-3	Dimethylphthalate	1	1.	įŪ	i
208-96-8	Acenaphthylene		1.	ίŪ	i
606-20-2	2,6-Dinitrotoluen	ei	1.	เบ็	i
				i	i

#### REGION V SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

91CD01R01

Study Name: E. I. DuPONT E. CHICAGO IL AFESSCRL

Lab Code: CHICAGOIL Case No.: CDO7506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) WATER

% Moisture: not dec.\_\_\_\_

1050 (q/mL) ML Lab Sample ID: 91CD01R01

Sample wt/vol:

Lab File ID:

>NF183

Level: (low/med) LOW Date Received: 12/19/90

Date Extracted: 12/20/90

Extraction: (Sepf/Cont/Sonc)

SEPF

1/14/91 ... Date Analyzed:

Dilution Factor:

1.00000

GPC Cleanup:

(Y/N) N

pH:NA

dec.

CONCENTRATION UNITS:

CAS NO. COMPOUND (uq/L or ug/Kq) uq/L 99-09-2----3-Nitroaniline\_\_\_ IU 2. | 83-32-9----Acenaphthene\_ 1. IU 51-28-5----2,4-Dinitrophenol\_\_\_\_\_ IU 14. 100-02-7----4-Nitrophenol JU 1. 132-64-9-----Dibenzofuran\_ 1. U 121-14-2----2,4-Dinitrotoluene 1. IU 84-66-2----Diethylphthalate\_ 1. IU 7005-72-3----4-Chlorophenyl-phenylether\_\_\_| 1. ΙŪ 86-73-7----Fluorene 1. IU 100-01-6-----4-Nitroaniline\_ 3. IU 534-52-1----4,6-Dinitro-2-methylphenol\_\_\_ IU 14. 86-30-6----N-Nitrosodiphenylamine (1)\_\_\_ 1. IU 101-55-3-----4-Bromophenyl-phenylether\_\_\_\_ 1. ΙU 118-74-1----Hexachlorobenzene 1. IU 87-86-5----Pentachlorophenol\_\_\_\_ 2. IU 85-01-8-----Phenanthrene IU 1. 120-12-7----Anthracene 2. IU 84-74-2----Di-n-butylphthalate\_\_\_\_ IU 2. 206-44-0----Fluoranthene\_\_\_\_ IU 1. 129-00-0-----Pyrene IU 1. 85-68-7----Butylbenzylphthalate 3. IU 56-55-3----Benzo(a)anthracene\_\_\_\_ IU 1. 218-01-9-----Chrysene 1. IU 117-81-7----bis(2-Ethylhexyl)phthalate\_\_| 4. B 117-84-0-----Di-n-octylphthalate\_ ΙU 205-99-2----Benzo(b)fluoranthene 1. IU 207-08-9----Benzo(k)fluoranthene\_\_\_\_ 1. IU 50-32-8-----Benzo(a)pyrene\_ IU 2. 193-39-5----Indeno(1,2,3-cd)pyrene\_\_\_ 3. ΙU 53-70-3----Dibenzo(a,h)anthracene\_\_\_\_ 2. U 191-24-2----Benzo(g,h,i)perylene\_\_\_\_\_ IU

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES[ ] NO[]

LAF 0143325

91-20-3-----Naphthalene\_ 106-47-8-----4-Chloroaniline\_\_\_ 60000. IU D 07-68-3-----Hexachlorobutadiene\_ 60000. IU D 59-50-7----4-Chloro-3-methylphenol\_\_\_ 60000. IU D 71-57-6----2-Methylnaphthalene\_ 60000. |U D 60000. IU D 88-06-2-----2,4,6-Trichlorophenol\_\_\_\_\_\_ 60000. IU D **300000.** IU D 91-58-7----2-Chloronaphthalene\_\_\_\_ 60000. IU D 88-74-4-----2-bitroaniline 300000. IN D 131-11-3-----Dimethylphthalate\_\_\_\_ 60000. IU D 208-96-8-----Acenaphthylene\_\_\_\_ 60000. IU D oúo-20-2-----2,ó-Dinitrotoluene\_\_\_\_ JU D 60000.

FORM I SU-1

1/87 Reu.

1) - Cannot be separated from Diphenylamine
TENTATIVELY IDENTIFIED COMPOUNDS YES[X] NO[]

| 112-84-0-----Di-n-octylphthalate\_\_\_

| 50-52-8-----Benzo(a)pyrene\_\_

| 205-99-2----Benzo(b)fluoranthene\_\_\_\_|

193-39-5-----Indeno(1,2,3-cd)pyrene\_\_\_\_\_

| 53-70-3-----Dibenzo(a,h)anthracene\_\_\_\_|

| 191-24-2----Benzo(g,h,i)perylene\_\_\_\_\_|

| 207-08-9----Benzo(k)fluoranthene\_\_\_\_

FORM I SV-2

1/87 Rev.

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#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

	EPA	SAMPLE	NO	· · · · · · · · · · · · · · · · · · ·
-       	91CI	001501		

Study Name: E. I. DuPONT E. CHICAGO IL A 5SCRL

Lab Code: CHICAGOIL Case No.: CDO7506 SAS No.: EIDUPN SDG No.: AFE104

Matrix: (soil/water) SOIL

Sample wt/vol: 30.06 (g/mL) g

Level: (low/med) LOW

Extraction: (Sepf/Cont/Sonc) SEPF

% Moisture: not dec.\_\_\_\_ dec.\_\_

GPC Cleanup: (Y/N) N pH:NA

Number TICs found:

Date Received: 12/19/90

Lab File ID:

Lab Sample ID: 91CD01S01

>NF193

Date Extracted:12/20/90

Date Analyzed: 1/14/91

Dilution Factor: 1.00000

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	1==
	Unknown	   2.56	37000.	===== J	•
2. 57103	Hexanoic acid (9CI)	1 19.89	100000.	J	
3. 10544500	Sulfur, mol. (58)	20.66	280000.	J	
4.	Total hydrocarbons	1 20.00	800000.	J	i
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# UNITED STALES ENVIRONMENTAL PROTECTIC.. AGENCY REGION 5

#### Water Division (5W)

230 South Dearborn Street Chicago, Illinois 60604

#### FACSIMILE COVER SHEET

TO: Jerry Meyer					
AGENCY/OFFICE/MAIL CODE					
OFFICE TELEPHONE NO.	FAX MACHINE NO. 2/9-391-4678				
	VERIFICATION NO. 219-391-4653				
FROM: Jim Novak					
AGENCY/OFFICE/MAIL CODE USEPA, Compliance Section, I	5WCC-TUB-8				
3/2-886-0177	DATE SENT				
REPLY TO					
FAX MACHINE NO. (FTS) 886-0957 (Automatic) (312) 886-0957	VERIFICATION NO. (FTS) 353-2147 (312) 353-2147				
COMMENTS					
THIS IS PAGE 1 OF PAGES (Please Number All Pages)					

0	MEVER
E	- DU PONT
52	15 KENNEDY AVE
ŁA	ST CHICAGO, IN 46312
	irry.
	S PER OUR PHONE CONVERSATION WITH MS PIXIE NEWMAN (CHEMHILL)
	N THIS DATE I AM PROVIDING THE FOLLOWING AUTHORIZATION
	EGARDING REQUIREMENTS OF OUR 308 INFORMATION REQUEST
	2 OCKET # V-W-91-308-11):
Ų,	YOU MAY SUBSTITUTE "A WEEKLY COMPOSITE SAMPLE" FOR
	THE 8-HOUR FLOW PROPORTIONED CIMPOSITE SAMPLE"
	SPECIFIRO IN 3.A.Z ON PG 4.
<del></del>	SERCE VICE POLICE SERVICE SERV
(2:	) YOU MAY SUBSTITUTE DISSOLUED METALS FOR TOTAL
	METALS SPECIFIED IN 3.A.Z ON PG 5. FOR THE
	INITIATION OF THE MUNTHLY MONITORING PROGRAM
	·
<del>-</del>	only.
А	S I SAID, I WILL FOLLOW UP THIS FAX WITH A LETTER.
, <u>.</u> V	ON MAY ALSO BE INTERESTED TO KNOW THAT ENJUST
7	YANDRO YUM RESPONSE DATED 3/14/91.
•	y our state of the
1	- LL CALL YOU TOMORROW.
	fim Novale
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<b>J</b>	



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

#### Water Division (5W)

230 South Dearborn Street Chicago, Illinois 60604

#### FACSIMILE COVER SHEET

JERRY MEYER	
AGENCY/OFFICE/MAIL CODE  Du Pont	
OFFICE TELEPHONE NO.	FAX MACHINE NO. 2/9-39/-4678
	VERIFICATION NO. 2/9-391-4653
FROM: Jim Novak	
AGENCY/OFFICE/MAIL CODE  USEPA-5VYCC-T	UB-08
TELEPHONE NO. 312-886-0177	DATE SENT 3 21 91
REPLY TO	
FAX MACHINE NO. (FTS) 886-0957 (Automatic) (312) 886-0957	VERIFICATION NO. (FTS) 353-2147 (312) 353-2147
COMMENTS	

THIS IS PAGE 1 OF Z PAGES (Please Number All Pages)

321 91
OJ MEYER
EI DUPONT
5215 KENNEDY AVE.
EAST CHICAGO, IN 46312
RE: 308 INFO. REQUEST
DOCKET # V-W-91-308-11
DEAR JERRY,
AS PER OUR PHONE CONVERBATION THIS MORNING I
AM PROVIDING A CLARIFICATION FOR THE MONITORING
SAMPLE REQUIRED IN 3.A.ZON PG. 4.
YOU MAY SUBSTATUTE WEEKLY SAMPLES CONSISTING
OF 3 GRAD SAMPLES OVER AN 8-HOUR PERIOD"
FOR THE PREVIOUSLY SUGGESTED CHANGE.
i.l.: SAMPLE CONSISTS OF 3 GRAB SAMPLES, AND
MONITORING FREQUENCY IS 1/WEEK.
I'N SORRY FOR ANY CONFUSION. IF YOU HAVE
ANY QUESTIONS, PLEASE CALL ME AT 312 886 0177,
4 im Norale

2/2

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION V

DATE:

March 18, 1991

SUBJECT:

E.I. DuPont - Coordinated Action

FROM:

Jim Novak

Environmental Engineer

TO:

File

On March 18, 1991, at approximately 11 a.m., I had a telephone discussion with Mr. Gene Harstein, Plant Manager of the DuPont plant in East Chicago, Indiana. He said that I should be receiving DuPont's response to the 308 information request this morning. He said that he thought that he had eliminated the seep, but it reappeared. He had some additional sampling data and has included it with the response. He expressed concern about receiving information requests from other programs and wanted to know what we were after and could we coordinate our requests. He also wanted to meet with us in about 2 or 3 weeks. He again stressed his willingness to work with us and emphasized his (and DuPont's) commitment to do the necessary clean up. He also had reservations about other programs "jumping in" a few months after a clean up effort would be initiated. (Note: Clean up or remediation has not yet been defined).

I explained the ongoing effort by our agency to coordinate our activities and further explained the "Multi-media enforcement strategy"; ongoing planning, different roles of players (both inter and intra-agency), and proposed outcome. Succinctly, I told him that I plan to meet with GW, RCRA, and CERCIA this week, discuss various program requirements and needs, develop proposed coordinated action, and draft same for upper management approval. Then we would involve IDEM and possibly IEPA and get their input and encouraged them to be a party to this approach. Finally, within a month or so I suggested that all parties meet with DuPont to discuss implementation. He and I both agreed that the final solution should be embodied in a Consent Decree which would establish requirements, timeframes, etc. I suggested he run this approach through his upper management so DuPont could also sponsor this approach. (Penalty was not discussed)

By copy of this memo I'm asking for comments and/or suggestions. Further, if someone is opposed to this approach, please speak up <u>now</u>. Also, if you know of some other program element that should be involved please let me know ASAP.

cc: Mikulka, 5WCC
Tolpa, 5WCC
Filippini, 5WCC
Witt-Smith, 5HR
Melville, 5WG
Malek, 5HSM
Kovach, 5WCC
Atteberry, 5WCC

DECENYED

TECHNOLIN WAT

SUPERFUND PROGRAM MANAGEMENT BRANCH

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5WCC-TUB-8

## CERTIFIED MAIL RETURNED RECEIPT REQUESTED

Norman D. Griffiths, Esq. E.I. DuPont DeNemours & Co., Inc. Legal Department, Suite D-7007 1007 Market Street Wilmington, Delaware 19898

Re: Section 308 (Clean Water Act)
Information Request
E.I. DuPont DeNemours & Co., Inc.
NPDES Permit No. IN0000329
Docket No. V-W-91-308-11

Dear Mr. Griffiths:

This letter is in response to your letter of February 21, 1991, on the above referenced Section 308 Information Request (Request). As per your request, all communications on this matter will be directed to you as the authorized representative.

Please note that any written statements submitted pursuant to this Request must be notarized and returned under an authorized signature certifying that all contents contained herein are true and accurate to the best of the signatory's knowledge and belief. (See last paragraph on page 5 of the Request)

Regarding your concern about page 6 of the Request, no additional information was/is requested. A copy of the correct page 6 of the Request is enclosed. I'm sorry of any inconvenience this may have caused.

If you have any questions, please contact Mr. Novak at (312) 886-0177.

Sincerely yours,

Dale S. Bryson Director, Water Division

CC: E.F. Hartstein, DuPont (w/enclosure)
David Nelsen, IDEM (w/enclosure)
Skip Bunner, IDEM (w/enclosure)

bcc: Tolpa

308 File (Replace Pg. 6)

JNOVAK/DERIERA A:DUPONT-E.lTR March 11, 1991 NOVAK #1 DISK

3/15

) A) n 3(5/9)

DM /3/15/91

3/15/91 Bo Neither the issuance of this Request by the U.S. EPA nor compliance with this Request by DuPont shall be deemed to relieve DuPont of liability for any penalty, fine, remedy or sanction authorized to be imposed pursuant to Section 309(b), (c), (d) and/or (g) of the Clean Water Act, including but not limited to any and all violations addressed in this Request. The U.S. EPA specifically reserves the right to seek any or all of the remedies specified in Section 309(b), (c), (d) and/or (g) of the Clean Water Act for each and every violation cited in this Request.

bale S. Bryson

Director, Water Division

U.S. Environmental Protection Agency

Region V

tebray 13, 1991

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION V

**DATE:** March 14, 1991

SUBJECT: DuPont, East Chicago, Indiana - Status of Outfall Sample Analysis

FROM: Jim Novak, (5WCC)

TO: File

February 14, 1991, I called J.P. at the CDO and inquired about the status of the analysis of the sample collected from DuPont's unpermitted discharge. He said that he'd check with CRL and get back to me. He called back and said that he could get me the results by the 22nd if I didn't want to wait for the report. I said that I'd wait, but I wanted the report to identify any high levels of herbicides, organics or whatever. He said that that's no problem and that the report and analysis should be completed by March 1, 1991. This will correspond nicely to when we should receive DuPont's response to our 308. J.P. also said that the report will identify that the sample was taken from a pond in front of the outfall because there was no flow from the outfall at the time the sample was taken.

On March 14, 1991, I again called J.P. The report is in typing and we should get it early next week.

cc: Tolpa, 5WCC
Filippini, 5WCC
Kovach, 5WCC
Melville, 5WG
Witt-Smith, 5HR
Malek, 5HSM





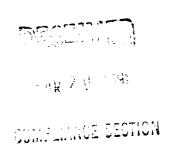
INDUSTRIAL CHEMICALS Wilmington, DE 19898

March 14, 1991

Rec. 1 4 pm 91 3/20/91

<u>Certified Mail</u> <u>Return Receipt Requested</u>

Dale S. Bryson, Director Water Division United States Environmental Protection Agency Region V (5WCC-TUB-8) 230 South Dearborn Street Chicago, Ill 60604



Attn: Chief, Compliance Section

Re: Information Request §308 Clean Water Act

Docket No. V-W-91-308-11

Dear Mr. Bryson:

Pursuant to the above-referenced request for information which was served on Friday, February 15, 1991 at the East Chicago, Ind. Plant of E. I. du Pont de Nemours and Company ("Du Pont"), please find below and attached, Du Pont's responses. Our responses are being filed within the time limit discussed with Mr. James Phillipini of your office on March 11, 1991.

Before responding to the specific requests it should be noted that Du Pont believes that page six of the Request served upon it was part of an Order meant for another company (ref. "ESCO"). Du Pont also asserts that the Request may have inadvertently left out a paragraph 4. The paragraphs in the Request go from #3 to #5. There is no paragraph #4. Although we noted the discrepancy about page six in our five-day response to this request, we did not note the missing paragraph 4. We would like to receive a complete Request from your office directed to Du Pont whether or not the items mentioned herein contain any additional requests.

In Du Pont's 5-day response letter, we stated that the apparent groundwater seep had been stopped pursuant to advice from representatives

of Region V and that responding to the requests involving grab sampling and monitoring was not possible because the flow of groundwater no longer existed. At the time of that letter, no flow from the site of the groundwater seep, or in its vicinity, had been observed for over a month. We believed that the actions taken to stop the seep flow, more fully described in our responses (to follow), had proven effective. Plant personnel went to the site of the seep on Monday, March 4, 1991 and observed a flow similar in quantity to the former flow of approximately one-quarter to one-third gallon per minute. We hasten to add that the flow was observed after heavy rains had saturated the area. It was unclear whether the seep was, in fact, due to infiltration of the rainfall or evidence of the presence of a groundwater spring. In any event, by Tuesday, March 5, 1991, the flow had decreased with indications that it would likely stop.

With this as background Du Pont would provide the following answers to the three requests (and sub-parts) seeking information about the groundwater seep.

1. Please provide within five (5) days of receipt of this request, a written statement as to the Company's intent to comply with the terms of this request.

The Request for information was served upon Du Pont's East Chicago Plant on Friday, February 15, 1991. A letter from Norman D. Griffiths, Du Pont Legal, to Dale S. Bryson, Director Water Division was sent within the specified five-day time limit, Certified Mail Return Receipt Requested on Thursday, February 21, 1991. Said letter indicated Du Pont's willingness to comply with the Request, subject to the limitations: (i) that the seep had been stopped pursuant to advice from EPA representatives; and (ii) that no further requests were contained in the (possibly) "missing" parts of the Request (page six). We would add in this response the possibility that paragraph 4 was inadvertently omitted from the Request.

- 2. Please provide within fifteen (15) days of receipt of this request, the information described in the paragraphs below.
- [A] In regard to the stream referred to in paragraph 1., of the Findings above, please answer the following questions.
  - (1) For approximately how long has Du Pont been aware of the waste stream?

Du Pont takes issue with the Agency's characterization of this approximately one-third gallon-per-minute groundwater seep as a "waste stream". This seep was not the result of current or recent plant

manufacturing activities. Based on discussions with personnel, Du Pont believes that it first became aware of the groundwater seep on May 7, 1990.

(2) Is the source of the waste stream known? Include any drawings to describe its source and any intermediate steps used to process this waste stream.

Du Pont does not believe that the abandoned and isolated sewer pipeline is a source of the groundwater seep. Rather, Du Pont believes that the seep is a visible surface expression of groundwater at the water table in a low lying area along the Grand Calumet River.

Du Pont is planning additional studies to verify this. The results of these studies will be reported to EPA upon completion. Information generated as a result of an on-going site investigation indicates that groundwater flows in a southerly direction across the plant to the Grand Calumet River, which could provide a mechanism for springs to form.

Prior to 1966, a process/stormwater sewer discharged in the vicinity of the seep. In 1966 the manhole (catch basin) through which both process and stormwater flowed was plugged thereby cutting off feed to the line discharging to the Grand Calumet. In accordance with a Consent Decree between the United States and Du Pont (Civ.#71-H-53, 1972) that line was plugged in 1974 at its up-stream end. A 10-foot section at the discharge end was removed and the remaining pipe plugged at that end. In any event, the former manufacturing processes that fed the line no longer exist. The buildings were razed many years ago. The abandoned line is not connected to the process sewer or storm water systems currently in use. Attachment #1 is a drawing of the former process sewer showing the dates and locations of this work. The drawing was created by O. J. Meyer, the current plant Environmental Coordinator based on old sketches and drawings of the plant's sewer system. Mr. Meyer included in his drawing, sketches showing the approximate locations of work performed on the line in the sixties and seventies when it was originally plugged along with depictions of recent work performed on it in reference to the apparent groundwater seep.

Attachment #2 is a drawing created by E. F. Hartstein, East Chicago Plant Manager, depicting the area surrounding the seep. It is based on field measurements made on March 11, 1991. The probable location of the terminus of the abandoned line is an estimate based on the recollections of a plant employee who was involved in the excavations of the line in July, 1990 and January, 1991.

(3) What Federal, State and/or Local Agencies have been notified of the existence of this waste stream? Include the date of notification and whom you contacted at each agency in your

response and all copies of any correspondence you have to support your notification dates.

Two employees of the Indiana Department of Environmental Management ("IDEM") became aware of the apparent groundwater seep in mid-1990 (approx. July, 1990) during a visit to the plant. They were Skip Bunner and Mike Kuss. Around the same time Bob Tolpa of USEPA Region V also became aware of the seep. There was never any formal "notification" to either agency regarding the seep as it was considered, since its discovery in May, 1990, a surface expression of groundwater.

(4) Was the waste stream ever identified in any NPDES permit application? Please include a copy of any NPDES application and identifying the waste stream.

The groundwater seep was never identified in any NPDES permit application.

(5) Has a Control Plan to cease or treat the discharge been developed? If so, what is the Control Plan, what has been done and when, and what costs are associated with the treatment or elimination of the discharge.

Plans have been developed and implemented in attempts to cease the flow of the seep. No plans have been developed to "treat" the discharge.

In May, 1990 in an effort to identify the source of the seep, Du Pont's environmental engineering consultants, CH2MHill, who were conducting an environmental site investigation of the plant, were instructed to conduct a one-time sampling program to identify the constituents of the seep. This work was separate and apart from the over-all site work and was not contemplated in the original Statement of Work ("SOW") for the investigation. CH2MHill took samples of the seep and analyzed same for the presence of: (i) most compounds on the "Target Compound List" ("TCL") and; (ii) additional selected metals. The analysis did not include TCL herbicides which were never manufactured on site and also did not include an analysis for PCB's. The results of that sampling indicated that the seep's constituents were very similar to those found in the site groundwater.

During the summer of 1990 Du Pont attempted to eliminate the seep by excavating and destroying another segment of the above-described, abandoned process sewer line. You will note in Attachment #1 that this work occurred approximately 100 feet from the river bank. These activities had little effect on the flow.

EPA representatives made a site visit on December 19, 1990 and strongly advised Du Pont to make the seep "go away". Du Pont responded to this advice by directing CH2MHill to sample the seep for selected metals and for non-TCL herbicides that had been manufactured or handled on site. During the week of January 28, 1991 work began to make the seep "go away". Sheet piling was driven to a depth of approximately 20 feet through the abandoned process sewer and its surrounding fill at a location approximately 110 feet from the river bank. In addition, approximately 30 feet of the line extending from a point approximately 25 feet from the river bank back to a point approximately 55 feet from the river bank, was excavated. This portion of the line was broken up in place. CH2MHill took samples of the water in the excavation and of surrounding soil. The excavation was then backfilled with flowable fill.

We are attaching the seep constituent analysis for the sampling that was conducted in May, 1990 (Attachment #3). The data from all the January, 1991 sampling has not undergone quality assurance validation as yet, but will be sent to EPA shortly after this task has been completed.

In 1990, Du Pont incurred approximately \$2,847.00 in costs associated with attempting to eliminate the seep. In 1991, Du Pont has incurred approximately \$29,000 in costs associated with another attempt at eliminating the seep, some of which has not yet been billed as of this writing.

[B] Provide a copy of any and all studies, reports and analyses performed on the waste stream referred to in paragraph 1. of the Findings.

Du Pont has made a thorough and diligent search of its records and files and to its knowledge the only studies, analyses and reports involving the groundwater seep are attached hereto, with the exception, as indicated above, of the analytical work involved with the January, 1991 sampling. We will forward same to you as soon as the report is complete.

3. Please provide within thirty (30) days of receipt of this request a discharge report containing the results of the following one time monitoring program and provide the monthly monitoring reports for the continuing monitoring program as specified below. Subparts 3A (1), (2) contain detailed information on the methodology to be used in the sampling/monitoring program. Not re-typed here.

Per EPA's request, Du Pont has sampled the groundwater seep in accordance with our interpretation of EPA's request of subpart 3(A)(1). The intent and content of the third item in U.S. EPA's request for information is not clear. It is our position that the need for and type of monitoring required should be assessed after U.S. EPA has reviewed existing information about the groundwater seep.

The "one time monitoring program" as defined by U.S. EPA has confusing and ambiguous requirements. U.S. EPA asks Du Pont to provide results for two samples analyzed for Priority Pollutants Numbers 001-013 (a partial listing of Volatile Organic Compound Priority Pollutants) and 114-128 (a partial listing of Inorganic Compound Priority Pollutants, including asbestos), but references U.S. EPA methods 1624, 1625, and 40 CFR 136 Appendix C. The latter referenced methods include volatile organic compounds, semi-volatile organic compounds, and other constituents; many more than the 27 Priority Pollutants listed by number. The request also specified identification and quantification of the 10 largest non-Priority Pollutant peaks. It is not clear whether Du Pont is being asked to quantify the concentrations of 128 Priority Pollutants plus the 10 largest non-Priority Pollutants.

The "monthly monitoring program" described is one that would apply to continuous discharge from a pipe containing process waste. The rationale for applying these sampling and analysis procedures to a groundwater seep monitoring program is not clear. Although groundwater quality does vary somewhat over time, the rate of this change does not warrant "weekly 8-hour, flow proportioned composite sampling, comprising no fewer than three (3) grabs collected at regular intervals." Sampling the seep is essentially the same as sampling groundwater. Single grab samples are appropriate.

The analytical methods 1624 and 1625, specified by U.S. EPA, are not commonly used for analyses of groundwater samples. While these methods are very precise, they are most useful and generally only necessary for samples that have matrix problems. Matrix problems are most common in industrial waste streams that may contain high percentages of sludge, sediments, or large organic polymers that may cause analytical interferences. Typical groundwater, and groundwater discharging from the seep at the East Chicago plant, does not contain such interferences that would necessitate the use of these precise methods. A rationale for specifying methods 1624 and 1625 was not provided by U.S. EPA.

Several of the analyses requested (e.g. BOD, total suspended solids, total inorganics, asbestos) are not typically applied to groundwater. No explanation as to why these parameters should be tested is provided by the U.S. EPA. Analysis of total inorganic concentrations, instead of dissolved inorganic concentrations, will yield erroneously high results. The analytical results will include suspended as well as dissolved constituents. The suspended inorganics detected are more likely to be present as a result of erosion and suspension of river bank fines and wastes than the transport of suspended solids in the groundwater flow. Mud and debris-free samples

cannot be collected off the mud flat where the seep discharges to the Grand Calumet River.

The other factor affecting Du Pont's ability to respond to Item #3 of the EPA's §308 Request for Information is the variability in seep discharge rate since receipt of the Request. When the Request was received, there was no discharge at the former seep location due to the actions taken by Du Pont to eliminate the seep. As of Monday, March 4, 1991, the seep reappeared. Its presence on Monday was correlated to rainfall over the past weekend. By the end of the following day, the rate of flow had decreased. The feasibility of future sampling may be affected by whether the seep is present and, if present, the rate of seep flow at the planned sampling time.

Du Pont requests that U.S. EPA review information provided by Du Pont and meet with Du Pont to discuss a reasonable approach to future seep sampling and/or mitigation prior to the next potential sampling event. Du Pont is willing to provide additional information but would like the path forward to be tailored to meet specific information needs.

Du Pont recognizes that its obligation to provide information under this §308 Request is continuing and will promptly forward any new information that comes to its attention that is responsive to the information requests contained herein.

If you have any questions, please call me on (312) 391-4601.

Very truly yours,

E. T. Hartstein, Plant Manager Du Pont East Chicago Plant

cc: Assistant Commissioner for Water Management IDEM
105 South Meridian Street
P. O. Box 6015

Indianapolis, Ind. 46206-6015

Attachments Est.Chcgo./7

STATE OF INDIANA)

LAKE COUNTY

Before me, Peggy J. Price, this <u>14th</u> day of March, 1991, personally appeared E. I. du Pont de Nemours and Company by Eugene F. Hartstein, Plant Manager, Du Pont East Chicago Plant and acknowledged the execution of the foregoing instrument.

Peggy J Prece

My commission expires \_\_3/17/93\_\_\_\_\_

## SKETCH OF APPARENT GROWDWATER SEEP

PLAN VIEW	ABANDONED LINE TERMINATES
PLANT /	IN THIS APPROXIMATE AREA
NORTH	Shope
· · · · · · · · · · · · · · · · · · ·	BASE OF SCOPE
WATER COWERS————————————————————————————————————	FLAT AREA
ACCURATE PRINTS SHOWING TERMINUS OF ABANDONED  F DON'T EXIST.  ATION SHOWN IS  APPROXIMATE	RIVER BANK
SIDE VIEW NORTH	<u> </u>
PLANT HEVEL A VLOOP	WATER UPWELLS IN DEPRESSION IN FLAT AND TRICKLES TO RIVER GRAND CAUMET RIVER
<u> </u>	46'
	FLAT" AREA
MENSIONS BASED ON MEASUREMENTS MADE 3/11/91, ALL DIMENSIONS APPROXIMATE, NOT DRAWN TO STRICT SCALE.	SKETCH BY: E. HARTSTEN 3-11-91



NET Midwest, Inc. Bartlett Division 850 West Bartlett Road Bartlett, IL 60103

Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Pixie Newman CH2M HILL 1890 Maple Av. Suite 200 06-11-90

Sample No.: 110394

Evanston IL 60201

Sample Description:

Seep; Surface Water Seep

Project GLO21838.C007; Du Pont East Chicago

Date Taken: 05-23-90 1300

Date Received: 05-23-90 1710

mg/L

74. Alkalinity, Bicarb. (CaCO3) Alkalinity, Carb. (CaCO3) Alkalinity, Total (CaCO3) <1. 74. Chloride 14. Fluoride 0.9 Phosphorus, Total 0.75 Solids, Dissolved 677. Sulfate 400. Aluminum <0.02 Antimony <0.04 Arsenic 0.026 Barium 0.043 Boron 0.21 Cadmium <0.005 Calcium 105. Chromium, Hexavalent <0.01 Chromium, Total <0.005 Copper <0.01 Iron 1.08 Lead <0.04 Magnesium 21.3 Manganese 0.24 Mercury <0.0001 Nickel <0.01 Potassium 2.57 Sodium 12.0 Zinc 3.28

mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mq/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mq/Lmg/L mg/L mg/L mg/L mg/L mg/L mg/L

mg/L

mg/L

Tomi Gartner Division Manager



NET Midwest, Inc. Bartlett Division 850 West Bartlett Road Bartlett, IL 60103

Tei: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Pixie Newman CH2M HILL 1890 Maple Av. 06-11-90

Suite 200

Sample No.: 110393

Evanston IL 60201

Sample Description:

Seep; Surface Water Seep

Project GLO21838.C007; Dupont East Chicago

Date Taken: 05-22-90 1430

Date Received: 05-23-90 1710

COD Cyanide, Total Nitrogen, Ammonia Nitrogen, Kjeldahl

34. <0.001 0.20 0.41

mg/L mg/L mg/L

3

Jale Ker Toni Gartner

Division Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Pixie Newman

CH2M HILL

1890 Maple Av.

Suite 200

Evanston IL 60201

06-11-90

Sample No.:

110393

Sample Description:

Seep; Surface Water Seep

Project GLO21838.C007; Dupont East Chicago

Date Received: 05-23-90 1710 Date Taken: 05-22-90 1430

#### VOLATILE COMPOUNDS

Acrolein	<10.	ug/L
Acrylonitrile	<10.	ug/L
Benzene	<1.0	ug/L
Bromodichloromethane -	<1.0	ug/L
Bromoform	<1.0	ug/L
Bromomethane	<10.	ug/L
Carbon tetrachloride	<1.0	ug/L
Chlorobenzene	<1.0	ug/L
Chloroethane	<10.	ug/L
2-Chloroethylvinyl ether	<1.0	ug/L
Chloroform	<1.0	ug/L
Chloromethane	<10.	ug/L
Dibromochloromethane	<1.0	ug/L
1,2-Dichlorobenzene	<1.0	ug/L
1,3-Dichlorobenzene	<1.0	ug/L
1,4-Dichlorobenzene	<1.0	ug/L
1,1-Dichloroethane	<1.0	ug/L
1,2-Dichloroethane	<1.0	ug/L
1,1-Dichloroethene	<1.0	ug/L
cis-1,2-Dichloroethene	<1.0	ug/L
trans-1,2-Dichloroethene	<1.0	ug/L
1,2-Dichloropropane	<1.0	ug/L
cis-1,3-Dichloropropene	<1.0	ug/L
trans-1,3-Dichloropropene	<1.0	ug/L
Ethyl benzene	<1.0	ug/L
Methylene chloride	<5.0	ug/L
1,1,2,2-Tetrachloroethane	<1.0	ug/L
Tetrachloroethene	<1.0	ug/L
Toluene	<1.0	ug/L
1,1,1-Trichloroethane	<1.0	ug/L

Toni Gartner Division Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Pixie Newman CH2M HILL

1890 Maple Av.

Suite 200

Evanston IL 60201

06-11-90

Sample No.:

110393

Sample Description:

Seep; Surface Water Seep

Project GLO21838.C007; Dupont East Chicago

Date Taken: 05-22-90 1430 Date Received: 05-23-90 1710

Fluoranthene	<10.	ug/L
Fluorene	<10.	ug/L
Hexachlorobenzene	<10.	ug/L
Hexachlorobutadiene -	<10.	ug/L
Hexachlorocyclopentadiene	<10.	ug/L
Hexachloroethane	<10.	ug/L
<pre>Indeno(1,2,3-cd)pyrene</pre>	<10.	ug/L
Isophorone	<10.	ug/L
Naphthalene	<10.	ug/L
Nitrobenzene	<10.	ug/L
N-Nitrosodimethylamine	<10.	ug/L
N-Nitrosodiphenylamine	<10.	ug/L
N-Nitrosodi-n-propylamine	<10.	ug/L
Phenanthrene	<10.	ug/L
Pyrene	<10.	ug/L
1,2,4-Trichlorobenzene	<10.	ug/L

Toni Gartner Division Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Pixie Newman CH2M HILL

1890 Maple Av.

Suite 200

Evanston IL 60201

06-11-90

Sample No.: 110393

Sample Description: Seep; Surface Water Seep

Project GLO21838.C007; Dupont East Chicago

Date Taken: 05-22-90 1430 Date Received: 05-23-90 1710

#### BASE/NEUTRAL COMPOUNDS

Acenaphthene	<10.	ug/L
Acenaphthylene	<10.	ug/L
Anthracene	<10.	ug/L
Benzidine	<50.	ug/L
Benzo(a)anthracene	<10.	ug/L
Benzo(b) fluoranthene	<10.	ug/L
Benzo(k)fluoranthene	<10.	ug/L
Benzo(a) pyrene	<10.	ug/L
Benzo(ghi)perylene	<10.	ug/L
Benzyl butyl phthalate	<10.	ug/L
Bis(2-chloroethyl)ether	<10.	ug/L
Bis(2-chloroethoxy)methane	<10.	ug/L
Bis(2-ethylhexyl)phthalate	<10.	ug/L
Bis(2chloroisopropyl)ether	<10.	ug/L
4-Bromophenyl phenyl ether	<10.	ug/L
2-Chloronaphthalene	<10.	ug/L
4-Chlorophenylphenyl ether	<10.	ug/L
Chrysene	<10.	ug/L
Dibenzo(a,h)anthracene	<10.	ug/L
Di-n-butylphthalate	<10.	ug/L
1,2-Dichlorobenzene	<10.	ug/L
1,3-Dichlorobenzene	<10.	ug/L
1,4-Dichlorobenzene	<10.	ug/L
3,3'-Dichlorobenzidine	<20.	ug/L
Diethyl phthalate	<10.	ug/L
Dimethyl phthalate	<10.	ug/L
2,4-Dinitrotoluene	<10.	ug/L
2,6-Dinitrotoluene	<10.	ug/L
Di-n-octylphthalate	<10.//	ug/L
		/

Téni Gartner Division Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

110393

#### ANALYTICAL REPORT

Ms. Pixie Newman

CH2M HILL

1890 Maple Av.

Suite 200

Evanston IL 60201

Project GLO21838.C007; Dupont East Chicago

Sample Description: Seep; Surface Water Seep

06-11-90

Sample No.:

Date Taken: Date Received: 05-23-90 1710 05-22-90 1430

VOLATILE COMPOUNDS 1,1,2-Trichloroethane <1.0 ug/L Trichloroethene <1.0 ug/L Trichlorofluoromethane <1.0 ug/L Vinyl chloride <10. ug/L Xylenes, Total <1.0 ug/L

> Téhi Gartner Division Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### **ANALYTICAL REPORT**

Ms. Pixie Newman

06-11-90

CH2M HILL

Sample No.: 110393

1890 Maple Av. Suite 200

Evanston IL 60201

Sample Description:

Seep; Surface Water Seep

Project GLO21838.C007; Dupont East Chicago

Date Taken: 05-22-90 1430

Date Received:

05-23-90 1710

#### ACID COMPOUNDS

4-Chloro-3-methylphenol	<10.	ug/L
2-Chlorophenol	<10.	ug/L
2,4-Dichlorophenol	<10.	ug/L
2,4-Dimethylphenol	<10.	ug/L
2,4-Dinitrophenol	<50.	ug/L
2-Methyl-4,6-dinitrophenol	<50.	ug/L
2-Nitrophenol	<10.	ug/L
4-Nitrophenol	<50.	ug/L
Pentachlorophenol	<50.	ug/L
Phenol	<10.	ug/L
2,4,6-Trichlorophenol	<10.	ug/L

Toni Gartner Division Manager



1G-4878 REV. 9/89

Jim N Ber of 3/13/91

March 11, 1991

#### OVERNIGHT DELIVERY

Dale S. Bryson, Director Water Division U.S. EPA, Region V (5WCC-TUB-8) 230 South Dearborn Street Chicago, Ill 60604 DECEMENT

MAR 12 1973:

COMPLIANCE SECTION

Re: Extension of Time to Reply to §308 Clean Water Act Request

Dear Mr. Bryson:

This letter is to confirm a telephone conference between representatives of E. I. du Pont de Nemours and Company ("Du Pont") and Mr. James Phillipini of your office on Monday, March 11, 1991 in which agreement was reached to extend the deadline for Du Pont's reply to the §308 Clean Water Act Request for Information (Docket No. V-W-91-308-11)until the close of business on Friday, March 15, 1991.

We appreciate this courtesy and feel confident that our response will be filed within this new timeframe.

Very truly yours,

Norman D. Griffiths

Counsel

Environmental Law Group

Porman D. Giffiths

cc: E. F. Hartstein, Plant Manager
Du Pont East Chicago Plant
J. Phillipini, EPA Region V

East Chcgo./9.

CONVERSATION REC	ORD	11:25	DATE 3/1/	191
YPE VISIT	CONFERENCE	TELEPHONE	INCOMING	ROUTING NAME/SYMBOL INT
Location of Visit/Conference:			OUTGOING	V. Grant
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU NOVE GYIFTI	ORGANIZATION (Office, etc.)	, (219)		V. Novak
Eugene Hartstein SUBJECT	EI Dul	on/ 39)	-4601	
30B Begnest:				
SUMMARY M. C. D. A.	+0	til Mar	1 15	A 6
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ACTION REQUIRED				
NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE		DATE	1)/4/
ACTION TAKEN				,
SIGNATURE	TITLE		DATE	
50271-101	CONVERSATION REC	ORD .	OPT	IONAL FORM 271 (12-76) ARTMENT OF DEFENSE



Jim IV: I just talked to Norm briffith and Engene Hartstein of DePont They requested until March 15 th to respond to the 308. I agreed and requested the flu with that request in writing for the record. Jan F Ill de a memo.

LG-4878 REV. 9/89



LEGAL Wilmington, Delaware 19898 Jest 1 Jan 1 Rec'd ASN 3/6/91

ATTORNEY/CLIENT COMMUNICATION

February 21, 1991

# <u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Dale S. Bryson, Director Water Division USEPA, Region V 230 South Dearborn Street Chicago, Ill 60604

Re:

Clean Water Act §308 Information Request

Du Pont East Chicago, Ind. Plant Docket No. V-W-91-308-11

Dear Mr. Bryson:

This letter is to acknowledge receipt of the above-referenced Request for Information by E. F. Hartstein, Plant Manager of Du Pont's East Chicago, Ind. Plant on Friday, February 15, 1991. I am responding within the five-day time limit on behalf of E. I. du Pont de Nemours and Company in my role as the in-house environmental attorney responsible for Du Pont's environmental matters in the State of Indiana. Please direct all further communications in this matter to my attention with a copy to the Plant Manager. My full address is noted below.

We are confirming by this communication that Du Pont intends, to the extent practicable, to respond to the "Request for Information", subject to the limitations outlined below.

Du Pont takes issue with the use of the term "waste stream" to describe the discharge in the Request for Information. No current plant manufacturing operations contributed to the flow of what was more properly described as a "groundwater seep". Our responses will reflect this upgrade in description. It appeared to be the result of the southerly flow of groundwater

to the river. In addition, pursuant to strongly worded advice provided by representatives of your staff, Du Pont took steps, and succeeded in eliminating the seep flow. Thus, we will not be in a position to comply with the requests that involve sampling and monitoring of the seep. It no longer exists.

We are confused by the second line of the paragraph on page six of the Request which states: "...compliance with this Request by ESCO shall be deemed...", etc.". We are unfamiliar with the name ESCO. Assuming that the page was meant for someone else's "Request", I would respectfully ask that you send me a copy of page six that should have been included with the <a href="Du Pont">Du Pont</a> "Request for Information". This is especially important if <a href="our page">our page</a> six contained any additional information requests.

Very truly yours,

Morman D. Biffithe

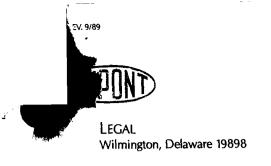
Norman D. Griffiths Counsel Environmental Law Group

cc: E. F. Hartstein, East Chicago Plant Skip Bunner, IDEM

Full address:

Norman D. Griffiths, Esq. E. I. du Pont de Nemours and Company Legal Department, Suite D-7007 1007 Market Street Wilmington, DE 19898 ph. (302) 774-5403

St. Mtrs./Ind./5



7000. Jag / Jan N Rec'd ANN 3/6/91

ATTORNEY/CLIENT COMMUNICATION

February 21, 1991

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Dale S. Bryson, Director Water Division USEPA, Region V 230 South Dearborn Street Chicago, Ill 60604

Re:

Clean Water Act §308 Information Request

Du Pont East Chicago, Ind. Plant

Docket No. V-W-91-308-11

Dear Mr. Bryson:

This letter is to acknowledge receipt of the above-referenced Request for Information by E. F. Hartstein, Plant Manager of Du Pont's East Chicago, Ind. Plant on Friday, February 15, 1991. I am responding within the five-day time limit on behalf of E. I. du Pont de Nemours and Company in my role as the in-house environmental attorney responsible for Du Pont's environmental matters in the State of Indiana. Please direct all further communications in this matter to my attention with a copy to the Plant Manager. My full address is noted below.

We are confirming by this communication that Du Pont intends, to the extent practicable, to respond to the "Request for Information", subject to the limitations outlined below.

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to the river. In addition, pursuant to strongly worded advice provided by representatives of your staff, Du Pont took steps, and succeeded in eliminating the seep flow. Thus, we will not be in a position to comply with the requests that involve sampling and monitoring of the seep. It no longer exists.

We are confused by the second line of the paragraph on page six of the Request which states: "...compliance with this Request by ESCO shall be deemed...", etc.". We are unfamiliar with the name ESCO. Assuming that the page was meant for someone else's "Request", I would respectfully ask that you send me a copy of page six that should have been included with the <a href="Du Pont">Du Pont</a> "Request for Information". This is especially important if <a href="our page">our page</a> six contained any additional information requests.

Very truly yours,

Norman D. Griffiths

Counsel Environmental Law Group

cc: E. F. Hartstein, East Chicago Plant Skip Bunner, IDEM

Full address:

Norman D. Griffiths, Esq. E. I. du Pont de Nemours and Company Legal Department, Suite D-7007 1007 Market Street Wilmington, DE 19898 ph. (302) 774-5403

St. Mtrs./Ind./5

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION V

DATE: FEB 1 5 1991

SUBJECT: E.I. DuPont, East Chicago - Phone Memo on 308

FROM: Jim Novak, 5WCC

Enforcement Unit II

TO: File

February 13, 1991, Ron Kovach and I called Gene Hartstein, Plant Manager of DuPont in East Chicago, and informed him that he will be receiving an information request (Section 308) from U.S. EPA on DuPont's unpermitted discharge. He said that he just mailed us a letter informing us that the discharge in question has been eliminated.

cc: Filippini Kovach

Tolpa

JNovak:bo

February 14, 1991

a:eidupont.308

North Calal

3/14

5WCC-TUB-8

### CERTIFIED MAIL P 564 581 540 RETURN RECEIPT REQUESTED

M.E. F. Hartstein
Plant Manager
E. I. DuPont
5215 Kennedy Avenue
East Chicago, Indiana 46312

Re: Section 308 (Clean Water Act)

Information Request

E. I. DuPont De Nemours & Co., Inc.

NPDES Permit No. IN0000329 Docket No. V-W-91-308-11

Dear Mr. Hartstein:

Pursuant to the authority provided by Section 308 of the Clean Water Act, 33 U.S.C. Section 1318, it is hereby requested that you furnish the United States Environmental Protection Agency with information pertaining to the above-referenced facility.

Please submit the information requested in the accompanying document with a notarized statement certifying that all representations contained therein are true and accurate to the best of your knowledge and belief. This information is necessary in order to evaluate E. I. DuPont's compliance with the requirements of the Clean Water Act.

If you have any questions regarding this matter, please contact Mr. James Novak of my staff at (312) 886-0177.

Sincerely yours,

ORIGINAL SIGNED BY
KENNETH A. FEMBLE
Dale S. Bryson

Director, Water Division

cc: David Nelsen, IDEM Skip Bunner, IDEM

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION V

IN THE MATTER OF:	) REQUEST PURSUANT TO
	) SECTION 308 OF THE CLEAN ) WATER ACT (CWA) 33 U.S.C.
E. I. DuPont De Nemours & Company Inc.	) SECTION 1318(a)
	) DOCKET NO. V-W-91-308-11

The following request is made pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (U.S. EPA) by the Clean Water Act, 133 U.S.C. Section 1318 and duly delegated to the undersigned Director, Water Division.

This request for information pertains to the E. I. DuPont De Nemours & Co., Inc. DuPont Plant located in East Chicago, Indiana (The Plant and/or The Company).

#### FINDINGS

- On December 19, 1990, a team of U.S. EPA investigators and a representative of Indiana Department of Environmental Management (IDEM) sampled a waste stream coming from the plant's property and discharging into the Grand Calumet River.
- 2. Mr. Hartstein and Ms. Newman represented the plant during the December 19, 1990, U.S. EPA and IDEM sampling referred to in paragraph 1., above.
- 3. Neither IDEM nor U.S. EPA have a record of an NPDES permit for the discharge referred to in paragraph 1 above.

#### REQUEST FOR INFORMATION

- 1. Please provide within five (5) days of receipt of this request, a written statement as to The Company's intent to comply with the terms of this request.
- 2. Please provide within fifteen (15) days of receipt of this request, the information described in the paragraphs below.
  - A. In regard to the stream referred to in paragraph 1., of the Findings above, please answer the following questions:
    - (1) For approximately how long has Dupont been aware of the waste stream?
    - (2) Is the source of the waste stream known? Include any drawings to describe its source and any intermediate steps used to process this waste stream.
    - (3) What Federal, State and/or Local Agencies have been notified of the existence of this waste stream? Include the date of notification and whom you contacted at each agency in your response and all copies of any correspondence you have to support your notification dates.
    - (4) Was the waste stream ever identified in any NPDES permit application? Please include a copy of any NPDES applications and identifying the waste stream.

- (5) Has a Control Plan to cease or treat the discharge been developed? If so, what is the Control Plan, what has been done and when, and what costs are associated with the treatment or elimination of the discharge.
- B. Provide a copy of any and all studies, reports and analyses performed on the waste stream referred to in paragraph 1. of the Findings.
- Please provide within thirty (30) days of receipt of this request a discharge report containing the results of the following one time monitoring program and provide the monthly monitoring reports for the continuing monitoring program as specified below.
  - A. For the waste stream referred to in paragraph 1. of the Findings conduct a one time monitoring program for priority pollutants and initiate a continuous monthly monitoring program for specific parameters for one year.
    - at least two (2) grab samples analyzed quantitatively for the Priority Pollutants (40 CFR 423, Appendix A, Numbers 001-013) using U.S. EPA methods 1624 and 1625, and for Priority Pollutants (40 CFR 423, Appendix A, Numbers 114-128) using U.S. EPA method 40 CFR 136, Appendix C.

(Reference: "Method 1624" Volatile Organic Compounds by Isotope Dilution GCMS; Methods 1625: Semivolatile Organic Compounds by Isotope Dilution GCMS." Office of Water Regulations and Standards, U.S. EPA. June 1989.)

In addition, an attempt shall be made to identify and quantify the ten (10) largest, non-Priority Pollutant peaks on the reconstructed gas chromatogram (ion plots), excluding unsubstitued aliphatic hydrocarbons and any peaks less than 10 times higher than the adjacent background noise. Identification shall be attempted by reference to the most current EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced GCMS analyst. Quantification may be an order-of-magnitude estimate, based upon the response of the nearest internal standard.

(2) The monthly monitoring program shall consist of taking weekly 8-hour, flow proportioned composite samples, comprising no fewer than three (3) grabs, collected at regular intervals and analyzed for the parameters listed below. Monthly Monitoring Reports shall then be submitted within 15 days after the end of the month in which samples were

taken. The analytical and sampling methods used shall conform to methods described in the current version of 40 CFR 136.

Arsenic Total Copper
Ammonia-N Total Zinc
Total Dissolved Solids Flow Rate
Total Fluorides Total Chlorides
Total Sulfates pH
Oil and Grease
Biological Oxygen Demand (5-Day)
Nitrates-Nitrites
Chemical Oxygen Demand
Total Suspended Solids

All information submitted pursuant to this request should be submitted to:

Director, Water Division,
United States Environmental Protection Agency
Region V (5WCC-TUB-8)
230 South Dearborn Street
Chicago, Illinois 60604
ATTN: Chief, Compliance Section

A copy of said information should be submitted to:

Assistant Commissioner for Water Management Indiana Department of Environmental Management 105 South Meridian Street P.O. Box 6015 Indianapolis, Indiana 46206-6015

Written statements submitted pursuant to this Request must be notarized and returned under an authorized signature certifying that all contents contained therein are true and accurate to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submittal of the requested information, that any portion of such statement(s) certified as true is false or incorrect, the signatory shall so notify Region

5. (See attached "Authority And Confidentiality Provisions")

Neither the issuance of this Request by the U.S. EPA nor compliance with this Request by DuPont shall be deemed to relieve DuPont of liability for any penalty, fine, remedy or sanction authorized to be imposed pursuant to Section 309(b), (c), (d) and/or (g) of the Clean Water Act, including but not limited to any and all violations addressed in this Request. The U.S. EPA specifically reserves the right to seek any or all of the remedies specified in Section 309(b), (c), (d) and/or (g) of the Clean Water Act for each and every violation cited in this Request.

Dale S. Bryson

Director, Water Division

U.S. Environmental Protection Agency

Region V

tebruar 13, 1491

#### **Attachment**

#### ADJINORITY AND CONFIDENTIALITY PROVISIONS

#### Authority

Information requests are made under authority provided by Section 308 of the Clean Water Act, 33 U.S.C. 1318. Section 308 provides that: "Whenever required to carry out the objective of this Act, ...the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment and methods (including where appropriate, biological monitoring methods), (iv) sample such effluent... and (v) provide such other information as he may reasonably require; and the Administrator or his authorized representative, upon presentation of his credentials, shall have a right of entry to...any premises in which an effluent source is located or in which any records...are located, and may at reasonable times have access to and copy any records...and sample any effluents..."

Please be advised that the submission of false statements is subject to federal prosecution under 18 U.S.C. 1001 and that this or any other failure to comply with the requirements of Section 308 as requested by U.S. EPA may result in enforcement action under the authority of section 309 of the Clean Water Act, which provides for specified civil and/or criminal penalties.

#### Confidentiality

U.S. EPA regulations concerning confidentiality and treatment of business information are contained in 40 CFR Part 2, Subpart B. Information may not be withheld from the Administrator or his authorized representative because it is viewed as confidential. However, when requested to do so, the Administrator is required to consider information to be confidential and to treat it accordingly, if disclosure would divulge methods or processes entitled to protection as trade secrets (33 U.S.C. 1318(b) and 18 U.S.C. 1905), except that effluent data (as defined in 40 CFR 2.302(a)(2)) may not be considered by U.S. EPA as confidential.

The regulations provide that one may assert a business confidentiality claim covering part or all of any trade secret information furnished to U.S. EPA at the time such information is provided to the Agency. The manner of asserting such claims is specified in 40 CFR 2.203(b). In the event that a request is made for release of information covered by such claim of confidentiality or the Agency otherwise decides to make a determination as to whether or not such information is entitled to confidential treatment, notice will be provided to the claimant prior to any release of the information. However, if no claim of confidentiality is made when information is furnished to U.S. EPA, any information submitted to the Agency may be made available to the public without prior notice.

Note: This information request is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. Chapter 35.

5WCC-TUB-8

## CERTIFIED MAIL P 564 581 540 RETURN RECEIPT REQUESTED

Plant Manager
E. I. DuPont
5215 Kennedy Avenue
East Chicago, Indiana 46312

Re: Section 308 (Clean Water Act)

Information Request

E. I. DuPont De Nemours & Co., Inc.

NPDES Permit No. IN0000329 Docket No. V-W-91-308-11

Dear Mr. Hartstein:

Pursuant to the authority provided by Section 308 of the Clean Water Act, 33 U.S.C. Section 1318, it is hereby requested that you furnish the United States Environmental Protection Agency with information pertaining to the above-referenced facility.

Please submit the information requested in the accompanying document with a notarized statement certifying that all representations contained therein are true and accurate to the best of your knowledge and belief. This information is necessary in order to evaluate E. I. DuPont's compliance with the requirements of the Clean Water Act.

If you have any questions regarding this matter, please contact Mr. James Novak of my staff at (312) 886-0177.

Sincerely yours,

CRIGINAL SIGNED BY HEMBETH A. FEMBLE

Dale S. Bryson Director, Water Division

cc: David Nelsen, IDEM

Skip Bunner, IDEM

bcc: Tolpa

Leder/Coleman

308 File

JNovak:bo February 7, 1991

a:Dupont.Har

Novak's disk

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Espa 800 2/12

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION V

IN THE MATTER OF:	) REQUEST PURSUANT TO
	) SECTION 308 OF THE CLEAN
E. I. DuPont De Nemours & Company Inc.	) WATER ACT (CWA) 33 U.S.C. ) SECTION 1318(a)
	) DOCKET NO. V-W-91-308- 11

The following request is made pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (U.S. EPA) by the Clean Water Act, 133 U.S.C. Section 1318 and duly delegated to the undersigned Director, Water Division. This request for information pertains to the E. I. DuPont De Nemours & Co., Inc. DuPont Plant located in East Chicago, Indiana (The Plant and/or The Company).

#### FINDINGS

- 1. On December 19, 1990, a team of U.S. EPA investigators and a representative of Indiana Department of Environmental Management (IDEM) sampled a waste stream coming from the plant's property and discharging into the Grand Calumet River.
- 2. Mr. Hartstein and Ms. Newman represented the plant during the December 19, 1990, U.S. EPA and IDEM sampling referred to in paragraph 1., above.
- 3. Neither IDEM nor U.S. EPA have a record of an NPDES permit for the discharge referred to in paragraph 1 above.

#### REQUEST FOR INFORMATION

- 1. Please provide within five (5) days of receipt of this request, a written statement as to The Company's intent to comply with the terms of this request.
- Please provide within fifteen (15) days of receipt of this request, the information described in the paragraphs below.
  - A. In regard to the stream referred to in paragraph 1., of the Findings above, please answer the following questions:
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    - (2) Is the source of the waste stream known? Include any drawings to describe its source and any intermediate steps used to process this waste stream.
    - (3) What Federal, State and/or Local Agencies have been notified of the existence of this waste stream? Include the date of notification and whom you contacted at each agency in your response and all copies of any correspondence you have to support your notification dates.
    - (4) Was the waste stream ever identified in any NPDES permit application? Please include a copy of any NPDES applications and identifying the waste stream.

- been developed? If so, what is the Control Plan, what has been done and when, and what costs are associated with the treatment or elimination of the discharge.
- B. Provide a copy of any and all studies, reports and analyses performed on the waste stream referred to in paragraph 1. of the Findings.
- 3. Please provide within thirty (30) days of receipt of this request a discharge report containing the results of the following one time monitoring program and provide the monthly monitoring reports for the continuing monitoring program as specified below.
  - A. For the waste stream referred to in paragraph 1. of the Findings conduct a one time monitoring program for priority pollutants and initiate a continuous monthly monitoring program for specific parameters for one year.
    - (1) The one time monitoring program shall consist of at least two (2) grab samples analyzed quantitatively for the Priority Pollutants (40 CFR 423, Appendix A, Numbers 001-013) using U.S. EPA methods 1624 and 1625, and for Priority Pollutants (40 CFR 423, Appendix A, Numbers 114-128) using U.S. EPA method 40 CFR 136, Appendix C.

(Reference: "Method 1624" Volatile Organic
Compounds by Isotope Dilution GCMS; Methods 1625:
Semivolatile Organic Compounds by Isotope Dilution
GCMS." Office of Water Regulations and Standards,
U.S. EPA. June 1989.)

In addition, an attempt shall be made to identify and quantify the ten (10) largest, non-Priority Pollutant peaks on the reconstructed gas chromatogram (ion plots), excluding unsubstitued aliphatic hydrocarbons and any peaks less than 10 times higher than the adjacent background noise. Identification shall be attempted by reference to the most current EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced GCMS analyst. Quantification may be an order-of-magnitude estimate, based upon the response of the nearest internal standard.

(2) The monthly monitoring program shall consist of taking weekly 8-hour, flow proportioned composite samples, comprising no fewer than three (3) grabs, collected at regular intervals and analyzed for the parameters listed below. Monthly Monitoring Reports shall then be submitted within 15 days after the end of the month in which samples were

taken. The analytical and sampling methods used shall conform to methods described in the current version of 40 CFR 136.

Arsenic Total Copper
Ammonia-N Total Zinc
Total Dissolved Solids Flow Rate
Total Fluorides Total Chlorides
Total Sulfates pH
Oil and Grease
Biological Oxygen Demand (5-Day)
Nitrates-Nitrites
Chemical Oxygen Demand
Total Suspended Solids

All information submitted pursuant to this request should be submitted to:

Director, Water Division,
United States Environmental Protection Agency
Region V (5WCC-TUB-8)
230 South Dearborn Street
Chicago, Illinois 60604
ATTN: Chief, Compliance Section

A copy of said information should be submitted to:

Assistant Commissioner for Water Management Indiana Department of Environmental Management 105 South Meridian Street P.O. Box 6015 Indianapolis, Indiana 46206-6015

Written statements submitted pursuant to this Request must be notarized and returned under an authorized signature certifying that all contents contained therein are true and accurate to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submittal of the requested information, that any portion of such statement(s) certified as true is false or incorrect, the signatory shall so notify Region 5. (See attached "Authority And Confidentiality Provisions")

Neither the issuance of this Request by the U.S. EPA nor compliance with this Request by DuPont shall be deemed to relieve DuPont of liability for any penalty, fine, remedy or sanction authorized to be imposed pursuant to Section 309(b), (c), (d) and/or (g) of the Clean Water Act, including but not limited to any and all violations addressed in this Request. The U.S. EPA specifically reserves the right to seek any or all of the remedies specified in Section 309(b), (c), (d) and/or (g) of the Clean Water Act for each and every violation cited in this Request.

Dale S. Bryson

Director, Water Division

U.S. Environmental Protection Agency

Region V

tebra 13, 1991

#### Attachment

#### AUTHORITY AND CONFIDENTIALITY PROVISIONS

#### Authority

Information requests are made under authority provided by Section 308 of the Clean Water Act, 33 U.S.C. 1318. Section 308 provides that: "Whenever required to carry out the objective of this Act, ...the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment and methods (including where appropriate, biological monitoring methods), (iv) sample such effluent... and (v) provide such other information as he may reasonably require; and the Administrator or his authorized representative, upon presentation of his credentials, shall have a right of entry to...any premises in which an effluent source is located or in which any records...are located, and may at reasonable times have access to and copy any records...and sample any effluents..."

Please be advised that the submission of false statements is subject to federal prosecution under 18 U.S.C. 1001 and that this or any other failure to comply with the requirements of Section 308 as requested by U.S. EFA may result in enforcement action under the authority of section 309 of the Clean Water Act, which provides for specified civil and/or criminal penalties.

#### Confidentiality

U.S. EPA regulations concerning confidentiality and treatment of business information are contained in 40 CFR Part 2, Subpart B. Information may not be withheld from the Administrator or his authorized representative because it is viewed as confidential. However, when requested to do so, the Administrator is required to consider information to be confidential and to treat it accordingly, if disclosure would divulge methods or processes entitled to protection as trade secrets (33 U.S.C. 1318(b) and 18 U.S.C. 1905), except that effluent data (as defined in 40 CFR 2.302(a)(2)) may not be considered by U.S. EPA as confidential.

The regulations provide that one may assert a business confidentiality claim covering part or all of any trade secret information furnished to U.S. EPA at the time such information is provided to the Agency. The manner of asserting such claims is specified in 40 CFR 2.203(b). In the event that a request is made for release of information covered by such claim of confidentiality or the Agency otherwise decides to make a determination as to whether or not such information is entitled to confidential treatment, notice will be provided to the claimant prior to any release of the information. However, if no claim of confidentiality is made when information is furnished to U.S. EPA, any information submitted to the Agency may be made available to the public without prior notice.

Note: This information request is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. Chapter 35.

BEGEIVED MAY 21 1991

U.S. EPA REGION V OFFICE OF REGIONAL COUNSEL

#### WATER ENFORCEMENT ACTION SIGN-OFF

PART I.	BACKGROUND		
	PERMITTEE NAME EIDUPONT DE NEMOURS & COMPANY (INC.)		
	PERMITTEE LOCATION 5215 KENNEDY AVE., EAST CHICAGO, IN 46312		
	NPDES PERMIT NUMBER IN0000329		
	NATURE OF VIOLATION AN UNPERMITTED WASTE STREAM LOCATED ON DUPONT		
	PROPERTY WAS OBSERVED DISCHARGING INTO THE GRAND CALUMETRIVER.		
PART II	RECOMMENDATION		
	TYPE OF ACTION SECTION 308 (INFORMATION REQUEST)		
	MAJOR-SIGNIFICANT-PRIORITY MINOR		
	name & date state contact notified $\frac{CARLA MILLER 2/12/91}{317-232-8409}$ any outstanding enforcement actions against this permittee:		
	WATER NO BUT EXTENSIVE GD. WATER NONITORING		
	AIR No		
	HAZ. MATERIALS No		
PART II	i. Concurrences Initials date agree disagree		
	ORIGINATOR $AAN$ $2/12/9/$ ( $V$ ()  CHIEF, ENFORCEMENT UNIT $A$		
	CHIEF, ENFORCEMENT UNIT / 2/12/91 (L)		
	ORC N/A () ()		
	CHIEF, COMPLIANCE SECTION My 2/12/91 (V)		
1	CHIEF, COMPLIANCE SECTION  ACHIEF, WATER COMPLIANCE BRANCH  OTHER  ()  ()		
,	OTHER () ()		
PART IV	. APPROVAL		
,,			
1	DIRECTOR, WATER DIVISION APPROVES (>) DISAPPROVES ()		
PART V.			



# ENFORCEMENT ACTION CODING SHEET

Enforcement Action Type (Command)    NOTICE OF VIOLATION	PERMITTEE: FI DUPONT	DOCKET NO: V-W-91- 308-1)			
MOTICE OF VIOLATION	NPDES NO: IN 0000329 ACTION DATE: 2/13/91				
1 INFO RECOMMENDATION DISCH  2 3 4 5 6 7 8 9 10    Info Recommend may be no longer than 30 characteres    Violations Resolve/Pended by Action (Check all that apply)   All Compliance Schedules(C1)   All Single events	NOTICE OF VIOLATION (20)  ADMIN ORDER 309(a) (21)  308 LETTER (15)  309(a)(5)(a) (23)  NPDES PENLTY AO CAT I (A1)  NPDES PENLTY AO CAT I (A3)  PRETRI PENALTY AO CAT I (A5)  PRETRI PENALTY AO CAT II. (A7)	UNDER REVIEW BY DOU			
2 3 4 5 6 7 8 9 10  Violations Resolve/Pended by Action (Check all that apply)  All Compliance Schedules(C1) Specific Single events	Enforcement Act	ion::Comments:::			
Violations Resolve/Pended by Action (Check all that apply)  All Compliance Schedules. (C1) All Single events(S1) Specific Comp. schedule(C2) Specific Single event(S2) All Effluent(E1) All DMR nonreceipts(E3) Specific Effluent(E2) Specific DMR nonreceipt(S1)  Violation Description/dates	2 3 4 5 5 6 7 8 9 9	L'D DISCH			
Violations Resolve/Pended by Action (Check all that apply)  All Compliance Schedules(C1)	10				
All Compliance Schedules(C1) Specific Comp. schedule(C2) All Effluent(E1) Specific Effluent(E2) Specific DMR nonreceipts(E3) Specific DMR nonreceipt(S1)  Violation Description/dates					
	All Compliance Schedules(C1) Specific Comp. schedule(C2) All Effluent(E1)	All Single events(S1) Specific Single event(S2) All DMR nonreceipts(E3)			
UNPERMITTED DISCHARGE	Violation Desc	ription/dates			



LEGAL Wilmington, Delaware 19898

January 28, 1993

#### **VIA OVERNIGHT MAIL**

Joseph A. Malek
Superfund Program Management
Branch (HSM-5J)
U. S. EPA
77 West Jackson Street
Chicago, IL 60604

Re: Supplemental § 104(e) CERCLA Information Request

Du Pont East Chicago Indiana Plant

IND 005 174

354

Dear Mr. Malek:

In accordance with our agreement to provide the Agency with Du Pont's response to EPA's Supplemental Information Request of October 1, 1992, I have enclosed the following:

- 1. Du Pont's narrative 20 page response to the EPA Supplemental CERCLA § 104(e) Request for Information dated October 1, 1992; and
- 2. Copies of responsive Du Pont documents, each containing a Du Pont identification number for our own control purposes.

You will also note that Du Pont has asserted claims of confidentiality over some of the enclosed documents by appropriately stamping each page of such material and setting it aside in a sealed manila envelope stamped accordingly with the provisions of 18 USC § 1905 and we assume that you will take the necessary precaution to maintain the proprietary nature of that information.

Thank you for your cooperation and if you have any further questions, please contact me at (302) 773-0149.

Yours truly,

Steven A. Coppola

## Response of E. I. du Pont de Nemours and Company ("Du Pont") to Supplemental CERCLA §104(e) Request for Information (10/1/92) - Du Pont East Chicago Plant

January 28, 1993

1. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal or hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, ditches, outfalls, to also include demolition or removal of buildings anywhere on the site, as referenced in the Phase I Report, buildings, tanks or containers and to the subsequent disposition of all residues, contaminated soil, water, or other debris resulting from the cleanup from the demolition and removal of facility structures, process sewers, ditches, outfalls, buildings, tanks, or containers from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

#### Du Pont Response:

This response contains all the information Du Pont was able to locate concerning the demolition of buildings at its East Chicago plant. This answer is also the response for Questions 1 through 9. Du Pont has located the following documents which respond to portions of Questions No. 1 and No. 9. See Documents DEC 0010001-001 through DEC 0010025-006 and DEC 00176-001 to DEC 0010081-012. Du Pont has been unable to locate a document summarizing the buildings that have been demolished since 1980 or any records that indicate whether the bricks from these buildings were either buried in place or landfilled on site. Information is based on the recollection of plant personnel who recall that most brick from demolition was landfilled in WMU 2. To the best of the plant's knowledge, some of the brick was used to fill in low spot areas. Examples of this include the brick from the demolition of the Sulfuric building, which was placed in the HCl neutralization pit, the brick from the AgChem building, which was placed in the Chrome Lagoon (WMU 13), the brick from the Main Office Building, which was placed in the river water intake canal of W001.

Plant personnel also recall that outside contractors were retained to dismantle the steel and equipment located within each building. The steel from the dismantlement was generally given to the contractors as partial compensation as per the negotiated contract. Any raw material contained in tanks was utilized on site until the tank was emptied. Finished product in storage tanks was sold to customers. Both the process and storage tanks were cleaned by first neutralizing any residues and then treating this material through the environmental control facility. The tanks would then be cut into smaller pieces and sold as scrap to an outside contractor. Underground storage tanks

were buried in place and then filled with pea gravel prior to 1985. After 1985, all operating USTs that were not closed were removed.

2. Identify and provide a detailed description of any and all of the locations from which the hazardous and nonhazardous solid waste from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated, stored, treated, or disposed from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

3. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes from the demolition or removal of facility structures, process sewers, buildings, tanks, and containers which were generated, stored, treated, or disposed from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

4. Identify and provide a detailed description of the nature, quantity and date(s) the hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks or containers were generated and removed at or from the facility from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

5. Identify and provide a detailed description of the activities undertaken in the generation of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers, including the date upon which each activity occurred from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

6. Identify and provide a detailed description of the methods and devices used to store or treat any residue or contaminated soil, water, or other debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates upon which such storage occurred from 1980 to the present. Specify whether said residues, soil, debris, etc., were stored in containers, tanks, surface impoundment, landfills, or piles.

See Answer to Response No. 1.

7. Describe any treatment conducted on any residue, contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

8. Identify and provide copies of all tests, analyses, analytical results, manifests, or any other document containing data related to any residue or contaminated soil, water, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

9. Provide date(s) of shipment and identify the name and address of any person or place to whom any residue or contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

10. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Unit # 2, 4, 8, 13, 29 as referenced in Phase I Report, from 1980 to the present. Such documents include, but are not limited to, manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined in 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

10 - 13: See documents numbered DEC0010026-001 to DEC0010045-002 as responsive to Questions 10 through 15 for WMU 4 and 2. Du Pont did not locate any documents that referred to WMU 8, 13, and 29.

Du Pont discloses the following information for WMU 2, 4, 8, 13 and 29. In addition, see the CH2M Hill Phase 1 Report.

WMU #2 - WMU 2 resulted in layers due to plant practice. WMU 2 includes WMUs 5, 14, 15, 16 and 35 as illustrated in the Phase 1 Report supplied to EPA in Du Pont's initial response. This area first consisted of approximately 15 acres of plant property and has now expanded to approximated 30 acres of land. The plant discarded various substances in this area some of which included general plant trash, zinc muds, glass, brick and some stainless steel materials. It has been estimated that a thousand (based on air permit) AgChem drums were disposed of by first creating "waste pits" and then incinerating the contents during the mid 1970s. The plant leveled the dump in 1972 and covered the vicinity with dirt.

As a result of the 1972 Consent Decree the plant began to landfill the environmental control filter cakes on top of this old rubble area. This substance is generated from the Ludox® process presently in operation at his date. This is the only material that is being disposed in WMU 14 to date.

WMU #4 - This WMU consists of four areas. The first area is the "Diked Steel Storage Tank" which the plant utilized for the storage of untreated hexane and toluene material, This material was shipped off-site for disposal. The second area, consists of the AgChem Drum Storage Area. These drums were placed on an asphalt pad in the early 1980s. The third, was the Reagent Drum Storage Area. These drums were stored on a gravel pad in the early 1980s. A number of these drums were off-spec product that was returned by various customers. The fourth area is active and consists of three 30,000 gallon, above ground weak acid tanks. All acid is presently consumed as a reactant in the EVC process.

WMU #8 - This area has not been used since 1977 as indicated in the Phase 1 Report.

WMU #13 - This area has not been used since 1977 as indicated in the CH2M Hill Phase 1 Report.

WMU #29 - The Sulfamic Acid Pits are "acid-brick" pits mortared with mastic that was used for spill control containment. The area consists of two 20' x 20' x 15' impermeable areas. Sulfamic acid, which contained 10-15% nitrogen, was collected in one pit and then overflowed into the adjacent pit prior to controlled discharge into the outfall in order to avoid exceedances (for nitrogen) of the plant's NPDES permit. The

pits were first installed in the early 1970s and were filled in with some rubble material around 1986 or 1987.

11. Identify and provide a detailed description of the Waste Management Unit #2, 4, 8, 13, 29 from which the hazardous and nonhazardous solid waste was generated, stored, treated, or disposed form 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 10.

12. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes generated, stored, treated, or disposed from 1980 to the present from Waste Management Unit # 2, 4, 8, 13, 29.

#### Du Pont Response:

See Answer to Response No. 10.

13. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous solid wastes were managed in Waste Management Unit # 2, 4, 8, 13, 29 and removed at or from the facility from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 10. Du Pont was unable to locate any documents that provide quantities of waste that were managed in WMU # 2, 4, 8, 13, 29. All responsive documents that were found are being submitted as noted in Response No. 10. Manifests were maintained for shipments off-site for WMU # 4, but were destroyed after three years as per Federal Regulations.

14. Describe any treatment conducted on any hazardous or nonhazardous solid waste in the Waste Management Unit #4 from 1980 to the present.

#### Du Pont Response:

None.

15. Provide date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped from 1980 to the present from the Waste Management Unit # 2, 4, 8, 13, 29.

There have been no shipments of hazardous or nonhazardous waste from any of the WMUs except for WMU #2. WMU #2 also contains WMU #16 which was the PCB Storage Area. For a further explanation of this area see Response No. 44. In addition, see Response No. 13.

16. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal or hazardous or nonhazardous solid wastes being generated, treated, stored, or disposed from or at the facility, including but not limited to, waste presently being placed in Waste Management Unit #5, from 1980 to the present. Such document include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

#### Du Pont Response:

WMU #5 is encompassed in WMU #2. WMU #5 was used by the plant to landfill calcium silicate filter cakes and was closed in the early 1980s. Please see Documents DEC0010026-001 to DEC0010045-002 and answers provided in Response to Questions Nos. 10 through 15. Du Pont also makes reference to the CH2M Hill Phase 1 Report.

#### 17. Provide the following certification before executing the response

"I certify under the penalty of law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

#### Du Pont Response:

Du Pont would like EPA to cite the section of CERCLA § 104(e) that requires a respondent to certify its responses. EPA's own guidance documents which do not have the effect of law require an affidavit if a respondent fails to respond at all. Du Pont does not fit in that category. If you provide us with the statutory or regulatory authority for this request and the certification language is modified to reflect the fact

that the signor has not personally examined each and every documents, we will provide the Agency with an appropriate certification.

18. Furnish the name and last known address of the suppliers of organic and inorganic chemicals or solvents for the period of time that you have occupied the premises to and including 1990, and in the event that such chemicals were supplied by an affiliate or division of E. I. du Pont, then in that event identify in each instance the trade name or chemical composition of any such chemical or solvent.

#### Du Pont Response:

Due to Du Pont's Records Retention Program, it no longer has copies of all vendors that supplied organic and inorganic chemicals to the plant. All documents that were found are being produced. See Documents DEC0010046-001 to DEC0010075-004. Du Pont also refers to its 104 (e) Response dated November 22, 1991, Response No. 2.

19. Furnish any and all aerial photographs of your facility or any portion thereof and identify the year that the photo tends to depict the area photographed.

#### <u>Du Pont Response:</u>

See Documents DEC0010171-001 to DEC0010225-001 and DEC0010994-001 to DEC0010996.

20. Furnish copies of any and all local, state and federal permits granted or issued with reference to the operations of any portion of the facility or the use, construction, transportation, removal, storage of any chemical, substance or solvent or facility built, erected, or placed upon the property to contain, house, confine or process any such chemical, substance or solvents.

#### Du Pont Response:

See Documents DEC0010082-001 to DEC0010126-001. In addition, see Du Pont's November 22, 1991, 104(e) Response to Question No. 7.

- 21. With reference to Table 3-1 of CH2M HILL's Phase I Groundwater Assessment Report, does E. I. du Pont, its contractors or attorneys possess any record, document, report or any other writing
  - A. More descriptive of any waste unit's contents other than those disclosed within the column of the table labeled "Possible Contents"

B. Descriptive of any quantity received by any waste unit other than those disclosed within the right column of the table?

#### Du Pont Response:

Table 3-1 of CH2M Hill's Phase 1 Groundwater Assessment Report was a review of relevant documents from the East Chicago plant and interviews with plant employees. See documents supplied in Response to Question Nos. 10 through 16 as well as Documents DEC0010127-001 to DEC0020170-002.

22. If either or both of the preceding paragraphs are answered in the affirmative, furnish all such records, documents, reports or writings.

#### Du Pont Response:

See Answer to Response No. 21.

23. Do you possess any information or knowledge that the site may have had other Waste Management Units other than those which are identified within Table 3-1?

#### Du Pont Response:

Yes.

24. If the preceding question is answered in the affirmative, state the facts or basis of such information or knowledge.

#### Du Pont Response:

An area along the south side of the north roadway located south of WMU 1 was used as a burial ground for lead arsenate sludge generated in the AgChem Production Area. It was sluiced in a long trench and then covered with soil in the early 1950s. The exact quantities of lead arsenate disposed in this area is unknown. We have found no documents relating to this event.

25. Were any of the wastes or products from any of the thirty-six Waste Management Units or from those units identified in your response to Paragraph 23 disposed or discarded either by dumping such waste into, in, upon or adjacent to the Grand Calumet River?

Yes.

26. If yes, describe such waste or waste products, its quantity, the year such disposal commenced and the year it may have ended. In addition, furnish process flow charts descriptive of or explaining the resulting waste or waste product.

#### Du Pont Response:

To the best of Du Pont's knowledge and belief, WMU Nos. 13 (Chrome Lagoon) and 36 (Outfall No. 2) emptied directly into the Grand Calumet River. For further explanation regarding the possible waste that may have been discharged into the Grand Calumet please see the CH2M Hill Phase 1 Report supplied in Du Pont's November 22, 1991 104(e) Response. We have been unable to locate any other documents which set forth the types and quantities of waste.

27. Do you possess or does someone else possess the results of any analytical chemical tests of the soil, water or air above, under, at or near any of the waste management units identified in either Paragraph 21 or 23 above?

#### Du Pont Response:

Yes.

- 28. If the preceding question is answered in the affirmative, please
  - A. Furnish the name and address of each contractor or third party that may have conducted any such test, or participated in the analysis and the date of such test. If either a contractor or third person participated in such testing or analysis furnish such contractor's or third persons' name and address. If any test or analysis was undertaken by or participated in by a former employee, furnish the name and last known address of any such employee or employees, and
  - B. Furnish copies of all such tests and analysis.

#### Du Pont Response:

- A. The identifying information is contained on the reports.
- B. See Documents DEC0010255-001 to DEC 0010448-017. In addition, see Response to Question No. 33 and the CH2M Hill Phase 1 and 2 Reports.

## 29. Please furnish copies of each of the following documents references in CH2M HILL's report within Appendix A:

<b>Document No.</b>	<b>Document Description</b>
C-P-8C	Letter from EPA to U. S. Atty re waste constituents for Du Pont's discharges into the Grand Calumet River
C-P-8L	Plant environmental history
E-P-21A	Plant lifetime production record
E-P-25A	Process and storm sewers map
E-P-25B	Waste process waste outfall
E-P-25E	Plant outfalls into the Grand Calumet River
E-P-501L	Inventory of oil wastes from
	transformers
E-W-552Z	Plant discharges to river
E-W-554F	Waste disposal on land

#### Du Pont Response:

CH2M Hill has designated Document No. C-P-8C as "missing" from the files. "Missing" was defined as being referenced in another report received by CH2M Hill but the actual document was never seen in the plant's files. See Documents DEC0010449-001 to DEC0010457-002 in response to the other documents.

30. At any time did Du Pont dredge any material from the Grand Calumet River or its banks at or adjacent to the site?

#### Du Pont Response:

Yes.

- 31. If the preceding question is answered in the affirmative, please
  - A. Explain the reason, purpose or circumstance for any dredging operation,
  - B. Describe when any dredging took place, the portion of the river then involved, and where dredged material was disposed or stored,
  - C. Describe what was done to or with the dredged material, and
  - D. Furnish copies of all analytical or chemical tests or reports conducted on such dredged material.

The East Chicago plant was required by the November 14, 1972 Consent Decree to consolidate thirteen existing outfalls into three. In order to meet this requirement, the plant was required to construct two 24 inch discharge pipes. About 8 cubic yards of river bottom was removed during construction of which about 6 cubic yards was replaced as backfill around the pipes to restore the bottom to its original level. As an additional requirement of the 1972 Consent Decree, the plant was required to dredge approximately 500 cubic yards of sediment from the bottom of the Grand Calumet River. The dredged area was 150 feet in length, seven feet in depth and extended approximately 25 feet into the river. The dredged material was disposed on the plant in WMU #5. Although it was proposed that the dredged material be used for roadway improvement, this was never implemented due to the consistency of the material. The dredging operation was completed on September 14, 1973. See Documents DEC0010458-001 to DEC0010464-001.

32. Furnish a copy of the lease between Du Pont and Purdue University entered into during 1974, copies of all correspondence between the parties or their agents concerning that lease or correspondence concerning the University's findings. This lease is mentioned at paragraph 3 of your Response to a Section 104e Information Request dated November 22, 1991.

#### Du Pont Response:

See Documents DEC0010465-001 to DEC0010476-001.

On page 3-2 of CH2M HILL's Phase I report the statement is made that "Handling methods for the (production) wastes have changed dramatically in the 96 years of operation. Originally, plant wastes were discharged directly into the Grand Calumet River, on site pits, ponds, basins or landfill areas without pretreatment." Identify by name, date, author and descriptive title all reports, documents, writing, maps, plats photos, drawings, records which are in your possession which describe, explain, graphically represent or depict such original discharges and also those which were consulted or examined in preparation for the CH2M HILL report.

#### Du Pont Response:

See Documents DEC0010477-001 to DEC0010924-013 and DEC0010997-001 to DEC0011184-003...

34. Before NPDES permits were obtained for the site, describe the chemical contents of all discharged or discarded mud waters or processing waste waters and the means and methods of their disposal. If on site or into the Grand Calumet River identify the place of such disposal and amount thereof. If off site, furnish

the name and address of the transporter, the amount of water, and place to which such discharged or discarded waters were transported.

#### Du Pont Response:

The East Chicago plant disposed of zinc filter press cake or zinc mud from 1909 to 1969 in the area designated as WMU 35. As stated in the CH2M Hill Phase 1 Report, the plant was unable to locate documents describing the waste characteristics or quantities. Some documents that were uncovered state that waste mud from the filtration of aluminum chloride solution was discharged to the river. See Documents DEC0010925-001 to DEC0010925-019.

35. The CH2M HILL Phase I report states, at a number of locations therein, that some information, data and information necessary to prepare the report was obtained by interviewing current or former employees. Furnish the names of all persons so interviewed, describe his or her current or former position with Du Pont, supply the last known address of all former employees or third persons so interviewed and attach copies of all such interviews or reports of such interviews.

#### Du Pont Response:

35. O.J. Meyer

Du Pont employee

**Environmental Coordinator** 

East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312

Arnis Sraders

Du Pont retiree

(deceased)

Engineer

Andy Horvat

Du Pont Employee Mechanical Supervisor East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312

John Orban

Du Pont Employee

Research and Lab Director

East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312 Brad Kulesza

Du Pont Employee

FSA Sulfuric Acid Production Supervisor (E. Chicago -

1982-1983)

Chestnut Run Plaza

Centre and Faulkland Roads Wilmington, DE 19805

Gregory Behm

Former Du Pont employee.

Supervisor of EVC Area - E. Chicago Plant

Address Unknown

Archie Murrish

Du Pont Retiree.

Sr. Mechanical Engineer (Dismantlements) 5712 Blue Heron, Kalamazoo, Mi 49008

All listed current and former Du Pont employees are represented by counsel, Steven A. Coppola, Esquire (302) 773-0149. Any contact with these individuals should be coordinated through his office.

See Documents DEC0010926-001 to DEC0010927-016.

- 36. Page 3-4 of the CH2M HILL's report in describing WMU 4 states, "This WMU 4 consists of the on site interim storage areas for hazardous wastes. The AgChem drum area contains wastes that were generated in the operation of the AgChem processes." With reference to the statements quoted, please:
  - A. Explain the actual period of time that an AgChem product was stored at such onside location for each product mix formulated by, delivered to or processed by AgChem,
  - B. Describe the type of container used for such product while in the storage area,
  - C. Furnish all photographs in your possession which may depict the storage of such products,
  - D. Furnish the beginning and ending date of the AgChem operation, and
  - E. Furnish process flow charts of each and every chemical or formulation produced, prepared or engineered by the AgChem operation.

#### Du Pont Response:

Du Pont was unable to locate any documents responsive to Question 36. All information that was found in Du Pont's files was reported in the CH2M Hill Phase 1 Report.

37. Did E. I. du Pont place any chemical, waste, product, personal property or soil into, upon or at the wetland on its property?

Yes.

- 38. If the preceding question is answered in the affirmative, please:
  - A. Describe the chemical, waste, product or personal property that was so placed and
  - B. Indicate the starting and ending date of such placement.

#### Du Pont Response:

Du Pont has not developed information about the historical location of wetlands on the East Chicago plant property. It is not clear whether any of the 36 WMUs identified in the CH2M Hill Phase1 Report are located in wetland areas. However, Du Pont would speculate that one or more of the 36 WMUs are located in what would be classified as "wetlands." Du Pont has been unable to locate any documents, except for DEC0011185-001, that specify any other waste disposal activity in "wetlands" areas on the plant beyond the documents included in this Supplemental Response.

39. List all the pesticides ever formulated, manufactured, prepared, mixed or processed at the facility furnishing the beginning and ending date of such manufacture, preparation, mixture or processing and the amount of each such pesticide.

#### Du Pont Response:

The East Chicago Plant has not retained all manufacturing records of Du Pont pesticide products. To the best of its knowledge, the only documents remaining referencing production numbers are the 1976 through 1982 U.S. E.P.A. Pesticide Reports for Pesticide Producing Establishments. This information has been supplied below for Lorox®, Turersan®, Tupersan 70®, Karmex®, Ammate X®, Ammate X-Ni®, Ammate Solution®, and Hexazinone Technical for the time period between 1975 and 1981. See Documents DEC0010928-001 to DEC001095-003 as well as those referenced in Response No. 51.

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product
Insecticide Dust Mixtures	April 1936	July 1939	Info. not available
2,4-D Sodium Weed Killer 83%	Feb. 1946	July 1946	Info. not available

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product		
"Ammate" X "Ammate" X-Ni	April 1959	January 1978	9,801,000 lbs. 792,000 lbs.		
"Ammate" Solution	May 1959	January 1978	433,000 gallons		
Anisole	Nov. 1948	Nov. 1949	Info. not available		
Barium Fluosilicate	Feb. 1930	Nov. 1943	Info. not available		
Benomyl	Oct. 1968	Dec. 1970	Info. not available		
"Benlate"	Nov. 1968	Jan. 1971	Info. not available		
Bordeaux Mixture	March 1910	Oct. 1940	Info. not available		
Calcium Arsenate	March 1919	Aug. 1948	Info. not available		
Calcium Arsenite	June 1927	March 1931	Info. not available		
"Deenate" 25W	Sept. 1945	Oct. 1946	Info. not available		
"Deenate" 50w	Jan. 1946	Oct. 1947	Info. not available		
EPN Miticide	Feb. 1950	May 1952	Info. not available		
EPN 300 Insecticide	March 1950	June 1952	Info. not available		
EPN 45% Emulsifiable	July 1952	April 1953	Info. not available		
Fenuron	August 1964	Sept. 1964	Info. not available		
Garden and Potato Dust	March 1944	Dec. 1944	Info. not available		
"Karmex"	1970s	1970s	6,140,029 lbs.		
Lead Arsenate Phenothiazine Mixtures	March 1946	March 1947	Info. not available		

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product
Lead Arsenate Insecticide	March 1910	April 1949	Info. not available
Lime Sulfur Solution	March 1910	April 1949	Info. not available
Linuron	March 1964	May 1972	Info. not available
"Lorox"	Jan. 1963	Nov. 1981	41,281,734 lbs.
Siduron	Nov. 1964	Nov. 1981	Info. not available
Methoxychlor	Jan. 1947	Nov. 1949	Info. not available
"Marlate" 50	Aug. 1947	Sept. 1949	Info. not available
Methoxychlor Concentrate 80%	March 1949	March 1949	Info. not available
"Tupersan" "Tupersan 70"	Nov. 1964	Nov. 1981	1,333,574 lbs. 1,249,790 lbs.
Velpar Intermediate (hexazinone technic	Dec. 1974 al)	Jan. 30, 1987	4,708,000 lbs.

40. Has any employee, third party, or government agency ever communicated to E. I. du Pont that someone's death, bodily disease, or adverse health had been or could have been caused wholly or partially by any of the pesticides listed in response to Paragraph 18?

#### Du Pont Response:

Du Pont has not been able to locate any documents or other information indicating that its East Chicago plant has had such communication.

41. If "Yes" is supplied in response to the preceding question, then furnish a copy of all such communications if in writing and furnish a verbatim copy of all such oral communications.

Not applicable.

42. CH2M HILL's Phase I report, at Figure 1-2, describes WMU 5, 14, 20 and 29 as still active operations. Describe the waste management practices at each of these units and furnish copies of state, local government and federal permits issued with reference to all these units.

#### Du Pont Response:

The waste management practices at each of these units are fully described to the extent of Du Pont's knowledge in the Phase 1 Report. With respect to WMU #5, see Response to Question No. 16. With respect to WMU #29, see Response to Questions 10-13. WMUs #14 (New Landfill) and #20 (Above-Ground Tank) are still in current use. Included in response to this question is Document DEC0011186-001 to 0011186-010 which is an application to IDEM requesting that landfilling activity at WMU #14 be approved under the then-new state waste management regulations. There are no permits for the above-ground tanks since they are not required by federal or state regulation.

#### 43. When did the Freon Plant cease operations?

#### Du Pont Response:

The East Chicago plant discontinued its Freon® operations in 1977.

44. Do you have any information, reports, data or documents describing the amount of PCBs at any portion of the site or in the adjoining river but adjacent to the site? If so, furnish copies of all such reports, data, and documents.

#### **Du Pont Response:**

See Documents DEC0010951-001 to DEC0010967-001.

45. What year and month did the site first begin discharging its waste water into the East Chicago Sanitary District treatment plant and at what location at the site did such discharge first take place?

#### Du Pont Response:

Du Pont has been unable to locate any records responsive to this request. To the best of Mr. Meyer's knowledge Du Pont constructed sanitary sewers when it purchased the site in 1927. Mr. Meyer has no knowledge as to the location of the first discharge point.

47. (sic) What process waters discharged into the East Chicago Sanitary District, if any, and over what period of time did such discharge take place?

#### Du Pont Response:

None.

48. Identify, per seep, its daily maximum flow for all current and former groundwater seeps at the site.

#### Du Pont Response:

The only analytical information developed by Du Pont with respect to river bank seeps occurred in 1991 pursuant to 308 of the Clean Water Act. All of Du Pont's reports are on file with Region V. Nevertheless, see Response to Question No. 33 for copies of said reports.

49. Has the company ever manufactured or produced chemicals, compounds or use processes which contained mercury, nickel or cadmium?

#### Du Pont Response:

To the best of its knowledge, the East Chicago plant has never manufactured or produced chemicals, compounds or used processes which contained mercury or nickel. The East Chicago plant converted sulfuric acid from zinc ore through a roasting and vaporization process. The zinc ores were scrubbed to remove particulate matters. This material, which collected in the scrubber, was then landfilled in an area in WMU 33. Cadmium was an impurity that was contained in this discarded material.

50. Has the company ever manufactured or produced organic pesticides and/or herbicides?

#### Du Pont Response:

Yes.

- 51. If you answered "Yes" to the questions posed in paragraph 49 and/or 50, for one or both paragraphs furnish
  - A. Their chemical and compound name, including its trade name,
  - B. Their chemical composition,
  - C. The location at the premises where they had been manufactured or processed.

51. (a -b) The East Chicago plant no longer has copies of documents that name the chemical name and composition of <u>all</u> pesticides/herbicides that have been produced at the plant. The information that is available has been noted below. In addition, see Response to Question Number 39.

Trade name	Chemical Name	Chemical Composition
Benlate	Benomyl	Methyl 1(Butylcarbamoyl)-2- benzimidazole carbanate
Lorox	Linuron	3-(3,4 dichlorophenyl)-1-Methoxy- 1-Methylurea
Karmex	Diuron	3-(3,4-dichlorphenyl)-1,1 dimethylurea
Velpar	Hexazinone	3-cyclohexyl-6-(Dimethylamino)-1-methyl-1,3,5-triazine -2,4(1H,3H0-dione
Tupersan	Siduron	1-(2-methylcyclohexyl)-3- phenylurea
Ammate X Weed/Brush Killer	Ammonium Sulfamate	

- 51. (c) See Documents DEC0010968-001 to DEC0010974-001.
- 52. (sic) Have any of the chemicals, compounds, pesticides or herbicides been disposed of or discharged at the site?

53. If "Yes" is the answer to the preceding question explain the circumstances, the date, and describe the chemical, compound, pesticide or herbicide and the quantity so disposed or discarded.

As indicated in the CH2M Hill Phase 1 Report, WMU Numbers 4, 15, 22, 28, 32 contain pesticides that were either discarded or stored at the East Chicago plant. There is no documentation that describes the specific waste types or quantities for these WMUs. See CH2M Hill Phase 1 Report for further detail as well as Documents DEC0010975-001 to DEC0010993-009.

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O. J. MEYER EAST CONCLOOR RANG DUCOM 977 4653

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ORIGINAL

REVISION NO. 1

EFFECTIVE DATE 7/1/87

#### PURCHASE ORDER DATA SHEET

)MMODITY/SERVICE WASTE DISPOSAL (include supplier's designation, trade name, etc.)

CONTRACT NO.

PERIOD COVERED: 5/14/87 THRU 5/13/88

PRICE AGREEMENT NO.

GE-60158

OTHER REF.

(Show P.O. No.(s), if known)

DEPARTMENT(S):

PLANT (B): EAST CHICAGO, IN

.O. RESPONSIBILITY/ISSUED BY:

CORPORATE X BUYER

REGIONAL BUYER

BUYER

ADER SERIES TO BE USED:

WILMINGTON X ORDERS

LOCAL

O. J. MEYER

EAST CHICAGO, IN

add contract administrator(s), when applicable

UPPLIER CHEMICAL WASTE MANAGEMENT, INC.

FOR ORDERS:

FOR EXPEDITING (if different):

JPPLIER'S

200 CONTINENTAL DRIVE

DDRESS/

SUITE 100

HONE/ DMTACT NEWARK, DE 19713

THOMAS S. EGGERS

UANTITY

AS DU PONT ELECTS

UNIT

PER EXHIBIT "A" DATED MAY 6, 1987.

SCHEDULE "A" ATTACHED

SCHEDULE "B" ATTACHED

X MULTI-SITE WOLDNE DISCOUNT SINCLE-SITE VOLUME DISCOUNT RETROACTIVE PRICE CHARGE

give details here, under "Remarks", or on attachment

AYMENT ERMS

NET THIRTY (30) DAYS

date of correct invoice

receipt

REIGHT

ERMS

DEST. (DEL'D).

OTHER X (SEE REMARKS)

(If Ship Pt. Show City & State)

PREPAID ADDED

COLLECT

EAD TIME

PECS.

X INCLUDED IN CONTRACT

EMARKS REVISION NO 1 ISSUED TO UPDATED (C.I.D. PROCESSING AND LANDFILL RATE SHEET) FOR CUM'S CALUMET CITY, IL FACILITY.

CWM'S VOLUME DISCOUNT APPLIES.

NO OTHER CHANGES.

Show reason for PODS revisions here: also add details re pricing, terms, quantity, packaging,/distrybution. etc. as needed

B.G. SUMMIEL

7/27/87

T.L. Hemberge T.L. HAMBERGER

ISSUED BY

DATE

APPROVED BY



#### CHEMICAL WASTE MANAGEMENT, INC. C.I.D. Processing and Landfill Chicago, Illinois

#### RATE SHEET\*

Effective July 1, 1987

#### HAZARDOUS WASTE LANDFILL

Bulk Hazardous Solids Drum Hazardous Solids \$95.00 per cubic yard

\$70.00 per drum

NOTE: Limited of 10% total organics or 1% halogenated organics. Flash point must be < 100 deg. F open cup or < 40 deg. F from ambient temperature.

#### **ASBESTOS**

Bagged and Wetted

\$10.00 per cubic yard

#### DEWATERING PLANT

Bulk Acids Other Hazardous Liquids Drum Hazardous Liquids Drum Non Hazardous Liquids

reviewed case by case \$ .30 per gallon \$90.00 per drum \$38.00 per drum

#### NON HAZARDOUS LANDFILL CO DISPOSAL

Bulk Non Hazardous Sludge

\$10.45 per cubic yard

NOTE: All sludge must pass paint filter test.

\*Plus applicable taxes and fees.

10 amore



Chemical Waste Management, Inc.

200 Continental Drive Suite 100 Newark, Delaware 19713 302/454-1400 7 DE331三

ALSIP DISP 312 396 1060 P. O.

SCHEDULE 4651

May 5, 1987

APPROVUS

Approva m2-

312 891 1500 CID

Mr. Thomas Hamberger E. I. duPont de Nemours & Co., Inc. Materials and Logistics Dept. Wilmington, DE 19898

SUMPOULUS CO

mmifests

duPont Unsolicited Inquiry East Chicago, IN

Dear Mr. Hamberger:

The attached waste stream and related paperwork was forwarded to our CID facility for approval by Mr. J. Meyer of your East Chicago, IN plant. In talking with Mr. Meyer, he informed me that he was not aware of the procedures necessary to contract a waste stream with Chemical Waste Management. I discussed these procedures with him and he asked that Chemical Waste Management forward a formal quote to your attention as soon as possible. Please accept the attached Exhibit A as an unsolicited inquiry from our CID facility.

You may wish to consider issuing a new Purchase Order to cover the above referenced material. Your acknowledgement of this . letter will suffice until such time that a new Purchase Order is issued.

We appreciate having this opportunity to service duPont, Tom. Should you have any questions, please feel free to call.

CHEMICAL WASTE MANAGEMENT, INC.	E. I. DUPONT DE NEMOURS, INC.
Thomas S. Egges	
Signature THOMAS EGGERS	Signature
National Accounts Manager	
Title	Title
DATE: May 5, 1987	DATE:
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Ft Ways	219 436 5507
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ORIGINAL X REVISION NO. EFFECTIVE DATE 5/14/87

#### PURCHASE ORDER DATA SHEET

)MMODITY/SERVICE WASTE DISPOSAL (include supplier's designation, trade name, etc.)

CONTRACT NO.

PERIOD COVERED: 5/14/87 THRU 5/13/88

PRICE AGREEMENT NO.

GE-60158

OTHER REF.

(Show P.O. Mo.(s), if known)

DEPARTMENT(8):

.o. RESPONSIBILITY/ISSUED BY:

CORPORATE X BUYER

REGIONAL

RDER SERIES TO BE USED:

WILMINGTON X ORDERS

O. J. MEYER

EAST CEICAGO, IN

add contract administrator(s), when applicable

SUPPLIER CHEMICAL WASTE MANAGEMENT, INC.

FOR ORDERS:

FOR EXPEDITING (if different):

COM TOTAL

UPPLIER'S

200 CONTINENTAL DRIVE

SUITE 100

NEWARK, DE 19713

THOMAS S. EGGERS

(302) 454-1400

ITY

DDRESS/

HONE/

ONTACT

AS DU PONT ELECTS

TIKU

PER EXHIBIT "A" DATED MAY 6, 1987, ATTACHED.

SCHEDULE "A" ATTACHED

SCHEDULE "B" ATTACHED

X MULTI-SITE VOLUME DISCOURT

SINCLE-SITE VOLUME DISCOURT RETROACTIVE PRICE CHARGE

give details here, under "Remarks".

or on attachment

PAYMENT TERMS

NET THIRTY (30) DAYS

date of correct invoice From

X receipt

PREIGHT TERMS

F.O.B. DEST. (DEL'D).

(If Ship Pt. Show City & State)

OTHER X (SEE REMARKS)

distribution, etc. as needed

COLLECT

LEAD TIME

SPECS.

X INCLUDED IN CONTRACT

REMARKS

ELS IS A NEW AGREEMENT.

CWM'S DISCOUNT APPLIES. .

Show reason for PODS revisions here: also add details re pricing, terms, quantity, packaging,

5/15/87

A. M. FIORAVANTI

L. HAMBERGER

ISSUED BY

APPROVED BY

HATTE CODES

EIHIBIT "A"-COMPENSATION, DESCRIPTION OF WASTE.

WASTE MATERIAL

LPOSAL METHOD

WCF.

PAGES

DISPOSAL METHOD

DISPOSAL FEE

HDU-A-46051

CONTRACTOR'S

N/A

DUPONT

FLOOR SWEEPINGS (SOLID PARTICULATE MATERIAL FROM CLEANING FLOORS)

05/24/85

DATE

CID

\$38/DRUM (1) \$8/CUBIC YARD

TRANSPORTATION (When provided by the CONTRACTOR): \$480/load to CID using Alsip. To arrange a pick-up, please contact the Alsip Dispatcher at (312) 396-1060.

DEMURRAGE (When CONTRACTOR picks up waste): Per the Alsip Rate Sheet.

DISPOSAL FEE CODES:

(1) This material must be containerized; either in bags, drums, gaylord boxes or skaff bags.

NOTE: duPont 1987 volume discount of 7.0% will apply to all above referenced prices and Rate Sheet prices except for transportation and related items, taxes, and pass through charges of subcontractors. Invoicing will reflect charges when applicable.

\*Additional descriptions per the attached Waste Characterization Forms dated as shown above, which are a part of the Exhibit.

seAll prices in \$/55-gallon steel drums unless otherwise indicated.

WILM, M. & L. DEPT, COPY

0010010



#### CHEMICAL WASTE MANAGEMENT, INC.

#### EXHIBIT A

#### COMPENSATION/GENERAL INFORMATION For All CONTRACTOR'S FACILITIES

Effective January 1, 1987

TAXES: CONTRACTOR may invoice DUPONT for any applicable hazardous waste taxes.

Materials received non-conforming to the original Waste Characterization Form are subject to additional handling charges.

Each waste must be approved prior to pricing.

Disposal Method Abbreviations and Disposal Sites:

1



#### CHEMICAL WASTE MANAGEMENT, INC. C.I.D. Processing and Landfill Chicago, Illinois

#### RATE SHEET\*

#### Effective January 1, 1987

#### HAZARDOUS WASTE LANDFILL

Bulk Hazardous Solids
Drum Hazardous Solids

\$95.00 per cubic yard

\$70.00 per drum

NOTE: Limited of 10% total organics or 1% halogenated

organics. Flash point must be < 100 deg. F open cup or < 40 deg. F from ambient temperature.

#### **ASBESTOS**

Bagged and Wetted

\$10.00 per cubic yard

#### DEWATERING PLANT

Bulk Acids
Other Hazardous Liquids
Drum Hazardous Liquids
Drum Non Hazardous Liquids

reviewed case by case \$ .30 per gallon

\$90.00 per drum \$38.00 per drum

#### NON HAZARDOUS LANDFILL CO DISPOSAL

Bulk Non Hazardous Sludge

\$ 8.00 per cubic yard

NOTE: All sludge must pass paint filter test.

\*Plus applicable taxes and fees.



### CHEMICAL WASTE MANAGEMENT, INC Northern Region Trasportation Alsip, IL

#### RATE SHEET

#### Effective January 1, 1987

Tanker and Lugger Service	\$ 3.85/loaded mile *
Van Service	3.75/loaded mile *
Lugger Service Local (200 miles)	82.00 per hour portal to portal
Demurrage Charge	80.00 per hour, 1 hour (van drivers >1.5 hour)
12 c.y. Lugger Container	100.00 per month each **
12 c.y. Lugger Container (W/Removal Cover)	110.00 per month each **
Cart for Lugger Containers	100.00 per month each **

- \* Per established mile chart.

  \*\* Delivery charges extra for all above unless with scheduled pick-up.

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Please print or type in the unshaded areas only [fill—in areas are spaced for elite type, i.e., 12 characters/inch	<i>J</i>				Form Approved OMB No. 15	8-R0	1.75	
FORM U.S. ENVIRO	NME			CTION AGENCY	I. EPA I.D. NUMBER			T At a
Co Co	nsolia		NFORM Permits Pi structions"	_	FIND005174354			<u>.</u>
LABELITEMS  I. EPA I.D. NUMBER  III. FACILITY NAME  IND0051743  DU PONT E  5215 KENNE EAST CHICAG  VI. FACILITY  S215 KENNE EAST CHICAG  EAST CHICAG	I N DY , GO,	AVI AVI	ENUE N 461 ENUE	312	If a preprinted label has be it in the designated spece. If atton carefully; if any of it through it and enter the cappropriate fill—in area belt the preprinted data is abserted to the label space list that should appear, please proper fill—in area(s) belo complete and correct, you trams i, III, V, and VI (amust be completed regard items if no label has been the instructions for data tions and for the legal au which this data is collected.	en pi Revien is in orrect ow, A it (th tr the proview, If need incepi leas).	roviding the correct class, in the correct class, in the correct class, item	information the side in the side in the side in the sometion of the label is complete \$B\$ which replete all Refer to descrip-
II. POLLUTANT CHARACTERISTICS	_	4						
INSTRUCTIONS: Complets A through J to determine we questions, you must submit this form and the supplement if the supplemental form is attached. If you answer "no" is excluded from permit requirements; see Section C of the SPECIFIC QUESTIONS  A. Is this facility a publicly owned treatment works.	to ea	m li ch q ctio	sted in the suestion, v	e parenthesis following the que ou need not submit any of the o, Section D of the instruction SPECIFIC 6 B. Does or will this facility	stion, Mark "X" in the box in the forms. You may answer "no the definitions of bold—faced HUESTIONS (either existing or proposed)	me to "if y	MAS	giumn
which results in a discharge to waters of the U.S.? (FORM 2A)		х		aquetic enimei productio discharge to weters of the	enimel feeding operation or as facility which results in a U.S.? (FORM 2B)		X	11
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in	T 1	17	10	D. Is this a proposed facility in A or B above) which	(other than those described will result in a discharge to	10	Х	
A or B above? (FORM 2C)	"	.71	- 24	F Do you or will you inject	M 2D) t at this facility industrial or	15	29	87
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X	29	X	municipal effluent below taining, within one qui	the lowermost stratum con- inter mile of the well bore, rinking weter? (FORM 4)	31	X	25
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas pro- duction, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	3.0	X	16_	cial processes such as m process, solution mining tion of fossil fuel, or red (FORM 4)	t at this facility fluids for spe- ining of sulfur by the Fresch of minerals, in situ combus- lovery of geothermal energy?	37	X	30
<ol> <li>Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the in- structions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment eres? (FORM 5)</li> </ol>		X	42	NOT one of the 28 indi instructions and which v per year of any air pollut	ed stationary source which is ustrial categories listed in the still potentially emit 250 tons ent regulated under the Cleen or be located in an attainment	41	X	45
IIL NAME OF FACILITY	1-1-	7				1		
1 SMIP E. I. DU PONT DE NEMOURS	<u> </u>	<u> </u>	MPANY	<u> </u>	<u> </u>	40		
IV. FACILITY CONTACT	not A	HAI-			PHONE (esta code & no.)			
SIXSMITH JOHN ENV. CONT. COO	1		<del>,</del>	21				
V. FACILITY MAILING ADDRESS					9 9 9 2 0 4 0	<del> </del>		
A. STREET OR P.O.	BOX							
3 5 215 KENNEDY AVENUE	1 -1 -		· · ·					
B. CITY OR TOWN				C.STATE D. ZIP COI	DE			
4 EAST CHICAGO	1 T	1	<del></del>	IN 4 6 3 1	2			
VI. FACILITY LOCATION				and fair still as .	• 1			
A. STREET, ROUTE NO. OR OTHER	SPECI	FIC	IDENTIF	ER				
10 10		<u> </u>		48				
LAKE	<del>1 1</del>	<u> </u>	T T T					
, C. CITY OR TOWN				D.STATE E. ZIP COI	F. COUNTY CODE		Λ	<b>Λ</b> 1
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EPA Form 3510-1 (6-80)

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VII. SIC CODES (4-digit, in order of priority)			:	
A. FIRST			B. SECOND	•
7 2 8 1 9 (Specify)		7 2 8 7 9 (specify)		
INDUSTRIAL INURG	ANIC CHEMICALS	AGRIC	CULTURAL CHEMI	CALS
C. THIRD		(specify)	D. FOURTH	
7		7		
VIII. OPERATOR INFORMATION		15 14 . 19		
	A. NAME			B. Is the name listed in
T DU DOVE DE VENOUES				Item VIII-A also the owner?
8 E. I. DU PONT DE NEMOURS	& COMPANY			YES INO
18 16	•			
C. STATUS OF OPERATOR (Enter the app.)  F = FEDERAL M = PUBLIC (other than		r box; if "Other", specify.) ecify)	D. PHONE	area code & no.)
S = STATE O = OTHER (epecify) P = PRIVATE	P	•••, , , ,	A 302 7	7 4 1 8 2 5
E. STREET OF	R P.O. BOX	<del></del>	15 14 - 10 10	* 21 22 - 20
1007 MARKET STREET				
26	<del> </del>			
F. CITY OR TOW	N-	G.STATE H. ZIP CO		
B WILMINGTON	, , , , , , , , ,	DE 1989	Is the facility located	on Indian lands?
12 10	<del></del>	DE 1 9 8 9	) 8	A NO
X. EXISTING ENVIRONMENTAL PERMITS			**}	
A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions	from Proposed Sources)		
9 N IN0000329	9 P			
19 10 17 10	19 16 17 18	30	<u> </u>	
8. UIC (Underground Injection of Fluids)	E. OTHER			
9 U	g EAST CH	ICAGO DEPT. OF	AIR QUALITY (	NO NUMBER)
C. RCRA (Hazardous Wastes)	15 16 17 18 E. OTHER	34	<del></del>	
CITI TO THE TOTAL OF THE CONTRACT OF THE CONTR	tererer rest		WASTEWATER TR	
9 R	9 IW 880		WASTEWATER TR	EATMENT
XI. MAP				
Attach to this application a topographic ma	of the area extending to	at least one mile beyond	property boundaries. Ti	he map must sh
the outline of the facility, the location of a treatment, storage, or disposal facilities, and	ich of its existing and pr	oposed intake and discha	rge structures, each of it	ts hazardous waste
water bodies in the map area. See instruction	s for precise requirements	i.	Clude dii springs, nvers	end onier anniers.
XIL NATURE OF BUSINESS (provide a brief descri	ption)			
				<u>.                                    </u>
THE EAST CHICAGO PLANT	IS A DIVISION	OF THE CHEMICA	IS AND PIGMEN	TS DEPART-
MENT OF E. I. DU PONT	DE NEMOURS AND	COMPANY. THE	PLANT IS ENGA	GED IN THE
MANUFACTURE OF SULFURIO	J ACIDS, REAGE	NT GRADE CHEMIC	ALS, AGRICULT	URAL
CHEMICALS, SODIUM SILI	CATE, STLICA PI	RODUCTS CHLORO	SULFURIC ACID	FLUORO-
	, U111CII II	RODGELD, CHILORG	.0021 01120 11025	,
SULFURIC ACID AND SULF	AMIC ACID.			
XIII. CERTIFICATION (see instructions)			tale.	
I certify under penalty of law that I have pe	monelly evenined and a	n familiae with the info-		application and all
attachments and that, based on my inquir	y of those persons imme	idiately responsible for o	teining the information	n contained in the
application, I believe that the information i	s true, accurate and com			
false information, including the possibility o	•			ATE SIGNED
Robert J. Blair, Vice Preside	B. SIGNATU	JRE -		ALE SIGNED
Chemicals and Pigments		21/1/	′, ·	1-10-
COMMENTS FOR OFFICIAL USE ONLY			·	
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# Please print or type in the unshaded areas only (fill—in areas are spaced for elite type, i.e., 12 characters/inch.) U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION Consolidated Permits Program

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III. PROCESSES /cc	nnnuadi
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C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

TTI	ALCOU.		A		BBATTA	WASTES
ıv	116 / 6	1211111	(16 4	A / A	D 111 11 1 1 1 1 1	WACTED
4 7 .	222616	M 11011	<b>U</b> 1 11		<b>NDUUS</b>	MADIES

- A. EPA HAZARDOUS WASTE NUMBER Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle, if you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY For each listed wests entered in column A estimate the quantity of that wests that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed wests(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in column 8 enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE	METRIC UNIT OF MEASURE	COD
POUNDSP	KILOGRAMS	K
TONS	METRIC TONE	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking account the appropriate density or specific gravity of the waste.

#### D. PROCESSES

1. PROCESS CODES:

For listed hazardous wests: For each listed hazardous wests entered in column A select the code/s/ from the list of process codes contained in Item III to indicate how the wests will be stored, preted, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes, if more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- 1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B.C. and D by estimating the total annual
- quantity of the wasts and describing all the processes to be used to treat, store, and/or dispose of the wasts.

  2. In column A of the next line enter the other EPA Hazardous Weste Number that can be used to der vibe the wasts. In column D(2) on that line enter "included with above" and make no other entries on that line.
- 3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed westes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other weste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposel will be in a landfill.

	1	A. EPA HAZARD. B. ESTIMATED ANNUAL					1	. UNIT			D. PROCESSES												
LINE NO.	W	A	ST	E	D. 10 14)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	1	SURE (enter code)		1. PROCESS CODES (enter)												2. PROCESS DESCRIPTION (If a code is not entered in $D(1)$ )	
X-1	A	(	0	5	4	900		P		T	0	3	L	) 8	3 (	0	I	i		1	Î		
X-2	I	2	0	0	.2	400		P		T	0	3	L	) {	3 (	0	I	1		1	1		
X-3	L		0	0	1	100		P		Т	0	3	I	) {	3 (	0	7	,		Т	1		
X-4	1	p	0	0	2						1	1		Ī	ī		1	1		1		included with above	

EPA Form 3510-3 (6-80)

PAGE 2 OF 5

CONTINUE ON

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۷. ا	_	_		_		N OF HAZARDOUS WAST		_							D. PROCESSES			
텔 -	н	A. AZ	ZΑ	R	5.0 °	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UI	RE	-	٠.	1. PROC		COD#					
ZO	/e	nte	er (	00	de)	37 11	cod	(e)	27 -		/4	en ter	"	27 29	2. PROCESS DESCRIPTION (if a code is not entered in D(1))			
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3		-	$\dagger$				+	-	-	T		+	<del></del>					
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						(enter "A",	<b>8"</b> , '	·'C''.	etc. b	ehir								
											: 1	J		UU.	10147			

Continued from the front.		,
IV. DESCRIPTION OF HAZARDOUS WASTES (continue	ed /	
E. USE THIS SPACE TO LIST ADDITIONAL PROCESS		3.
		•
1		
İ		
EPA I.D. NO. (enter from page 1)		
FIND005174354745		
13 14 15		
V. FACILITY DRAWING		
All existing facilities must include in the space provided on page 5	a scale drawing of the facility (see instruction	ns for more detail).
All existing facilities must include photographs (aerial or g	around level that clearly delineate all	evicting structures: Avisting storage
treatment and disposal areas; and sites of future storage, to		
VII. FACILITY GEOGRAPHIC LOCATION		
LATITUDE (degrees, minutes, & seconds)	LONGITUE	DE (degrees, minutes, & seconds)
4 1 3 7 0		8 7 2 7 3 0
VIII. FACILITY OWNER	722	- 74 75 76 77 - 79
A. If the facility owner is also the facility operator as listed in	Section VIII on Form 1 "General Informat	tion" place an "X" in the box to the left and
skip to Section IX below.	. Social VIII SIII I SIII I, General III SIII E	, , , , , , , , , , , , , , , , , , , ,
B. If the facility owner is not the facility operator as listed in	Section VIII on Form 1 complete the folio	wing itams:
		2. PHONE NO. (area code & no.)
1. NAME OF FACILITY'S	LEGAL OWNER	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Ē		11 20 - 30 20 - 01 02 - 05
3. STREET OR P.O. SOX	4. CITY OR TOWN	S. ST. 6. ZIP CODE
F	Ğ	
15 1 16	19 116	10 41 42 42 - 11
IX. OWNER CERTIFICATION  I certify under penalty of law that I have personally exami	ined and an familiar with the informati	
documents, and that based on my inquiry of those individe	uals immediately responsible for obtain	ing the information, I believe that the
submitted information is true, accurate, and complete. I ar	m aware that there are significant penal	ties for submitting false information,
including the possibility of fine and imprisonment.		
Robert J. Blair, Vice President-	GNATURE	C. DATE SIGNED
Chemicals and Pigments	7.1-1 1 1 Sin	11/3/12
X, OPERATOR CERTIFICATION	, , , , , , , , , , , , , , , , , , ,	2
I certify under penalty of law that I have personally exami	ined and am familiar with the informati	
a i ceigny univer penalty of law that i have personally exami	nica and ani iaminia vitti lik iiiiUMMali	ing the information, I believe that the

submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

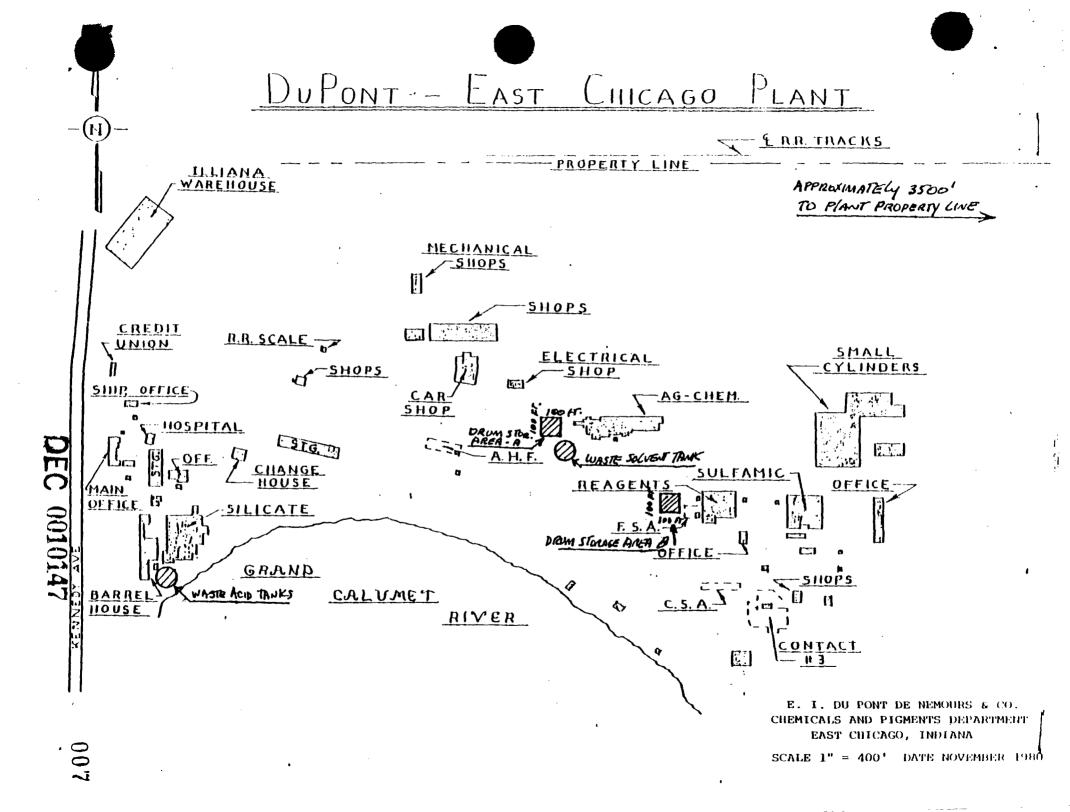
C. DATE SIGNED A. NAME (PRRt or type) B. SIGNATURE

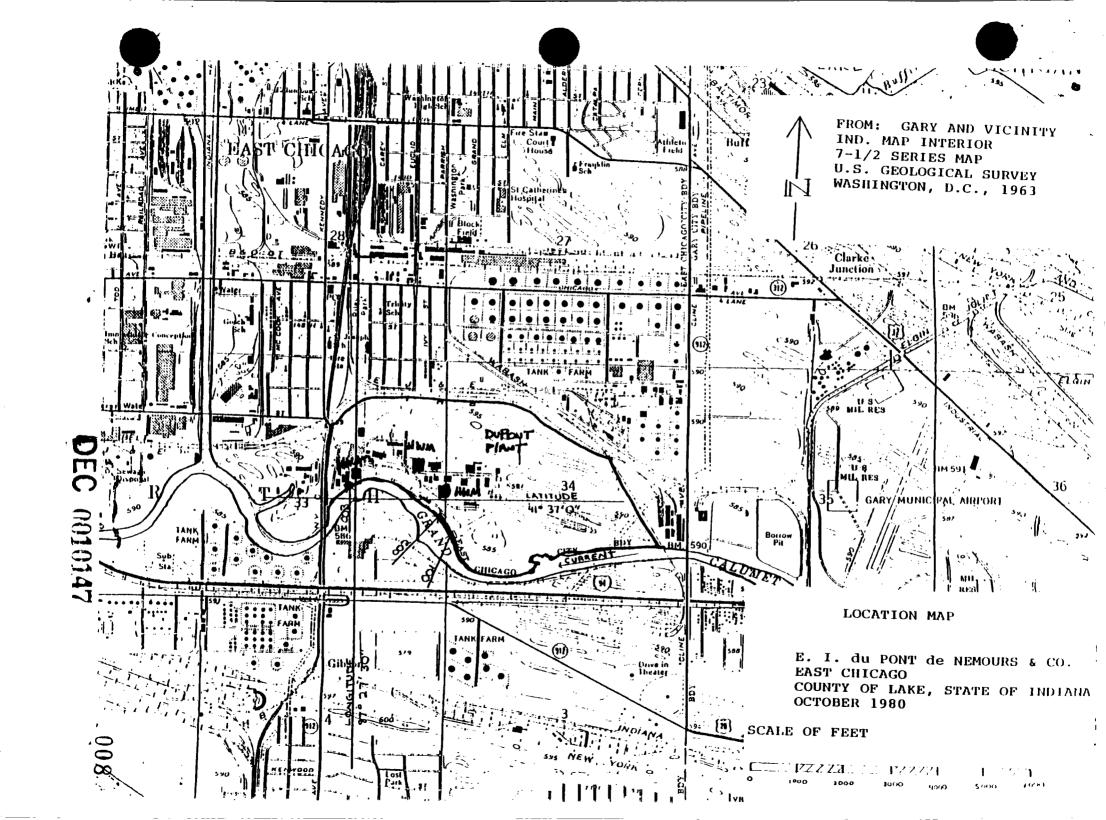
EPA Form 3510-3 (6-80)

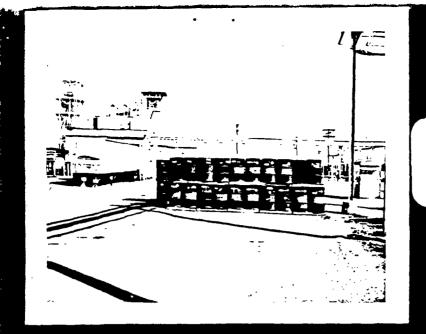
PAGE 4 OF 5

CONTINUE ON F

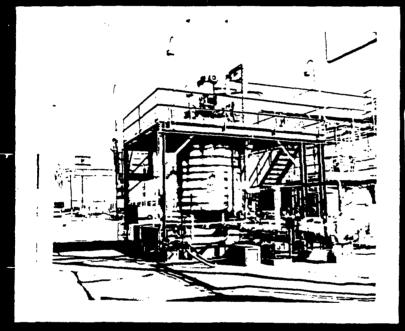
DEC 0010147







DRUM STORAGE AREA A

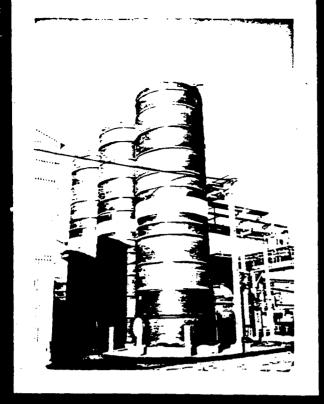


WASTE SOLVENT TANK



DRUM STORAGE AREA B

DEC 0010147



WASTE ACID TANKS

DEC 0010147

cc: E. F. Hartstein

October 26, 1990

TO:

Norm Bell

FROM:

0. J. Meyer @M 1924

#### LANDFILLING WASTE

East Chicago will continue to landfill filter cake on site as is our current practice. We expect to have some generation of furnace flu dust during routine furnace clean outs and after the next furnace rebuild (currently anticipated 3rdQ/1991.

Filter Cake 50,000,000 lb/yr Approx. 25M cu yds.

Flue Dust

5,000 lbs over next 2 years dropping to 0 after furnace rebuild.

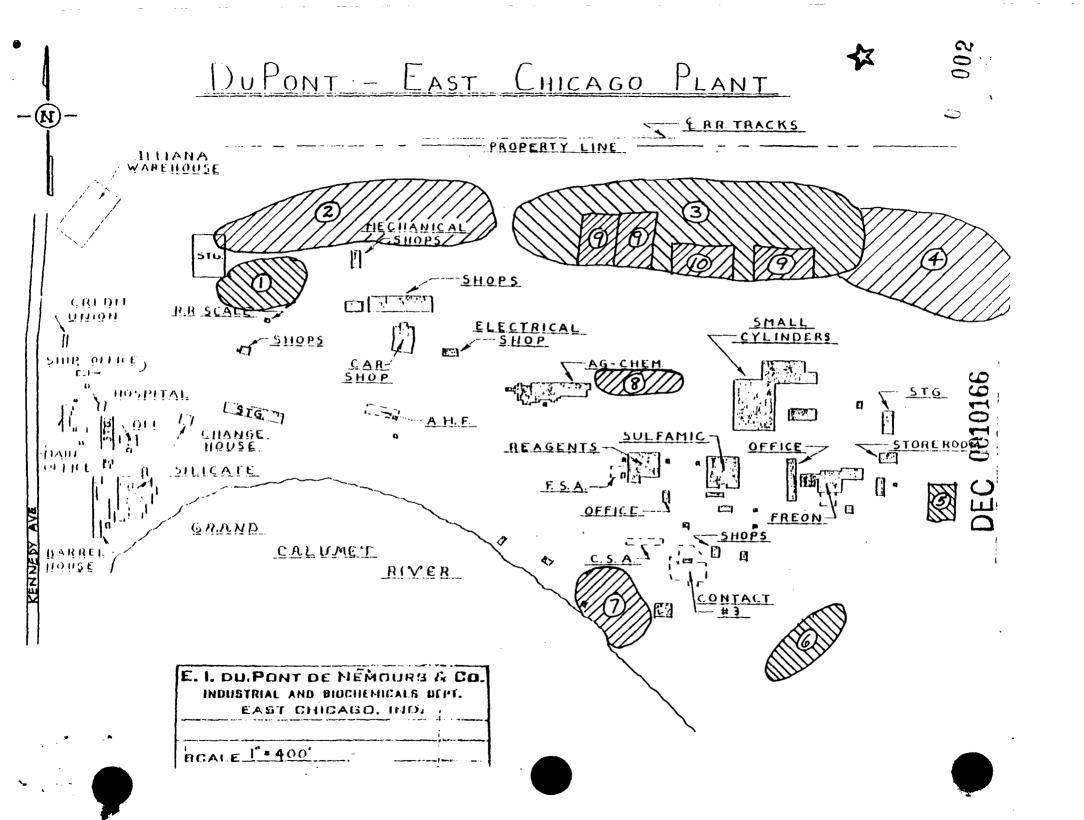
The filter cake is non hazardous and we currently have an application for permit pending with The State of Indiana to continue on site landfilling. Flue dust is a hazardous waste due to presence of CR+6. A program is actively underway to eliminate this waste by substitution of non-chrome bricks during furnace rebuilds.



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Area Number	Location	General Description of Facility	Disposal Dates	General Description of Waste	Facility Construction	Site & Ground - Water Conditions
1	See map	Waste pile	1909-1969	Waste from manufacture of zinc, aluminum and ammonium chlorides	Waste pile, ∿300' x 300'	Unknown
2	See map	Waste pile	Thru 1955	Chain grate stoker ash from old power-house	Waste pile, ∿1,000' x 400'	Unknown
. 3	See map	Waste pile	1926-1951	Calcium sulfate from trisodium phosphate operation	Waste pile, ∿1,000' x 400'	Unknown
4	See map	General dump area	1955-1974	Misc. chemicals, including sulfur and filter aid	Waste pile, ∿1,000' x 1,000'	Unknown 0101
5	See map	Neutralizing pit	1941-1974	HCl from Freon® operations	∿200' x 200' unlined pit containing limestone	Unknown O
6	See map	Waste pile	1947-1967	Zinc sinters from roasters, sulfur, and sulfur filter aid	Waste pile, ∿400' x 500'	Unknown
7	See map	Waste pile	Thru 1969	Fly ash from old powerhouse	Waste pile ∿400' x 200'	Unknown
8	See map	Waste pile	1910-1949	Lead arsenate and calcium arsenate wastes	Waste pile, ∿400' x 200'	Unknown
10	See map	Waste landfill	1974-1977	Calcium Fluoride	Clay-lined landfill ∿200' x 250'	Unknown

JTS/cky - 4/1.8/80



CH-1046 REV. 11/60



### E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS AND PIGMENTS DEPARTMENT

- F-W-SNA E-11 - 1777

bcc: S. S. Ulrey, C&P, Wilm.

(D. V. Luebke

(R. J. Libutti

S. H. Bornhurdt File-RCRA

5-1-8-50

March 17, 1982

United States Environmental Protection Agency Region V 230 South Dearborn Chicago, Illinois 60604

Attn: William Miner, Chief, Permits Section

Dear Sir:

On November 17, 1980, we mailed to you a Form 1 and Form 3 for the Du Pont East Chicago Indiana plant (EPA INDOO5174354) RCRA permit application. Copies of these forms are attached. At that time, we listed our plant as both a generator and a storer of hazardous waste because of the possibility that the ninety-day accumulation time limit might be exceeded.

In view of EPA's liberalization of the accumulation time rule and encouragement to withdraw protective filings (47 Fed. Reg. 1250-1251, January 11, 1982), we have reexamined storage requirements and determined that we no longer need to be classified as a storer under RCRA. Thus, the appropriate RCRA classification for our plant now is that of a generator, and we request that you amend your records accordingly withdrawing the application previously submitted since interim status is no longer required.

Please let me know if you have any questions.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS:grd

3 RECENT Spill reports that was in Packet #33.

00/0323 - 001 PATT of # 28 resp.

.

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From Tun Conne

1-13-86

Silicato Fumase Cheques Thee but

Attached is the analysis of chequer flue duct representing solids removed in decembe, 1985.

Steneral brainage Co. warmen semoned about 37 ft 5:1/2 drums; 4 drums from North, and 1:1/2 drums from Swith cheques flues. This represents 21 months aperation (3/84-12/86).

All lust samples taken from the chique 545.

flue on stack bore have been high in total

chome and GPA Toxisty test leachete has excee

the 5 ppm chome (hogendown west) limit.

rebuild (n 1989), we will replace our K-98 and P-90 chaques buth (0.8 and 0.7%. Caro, respectively) with their chame free equivalent. Chrome free Suicho were inclalled at Augusta in '84.

DEC 0010323

ENVIRONMENTAL CONSULTING AND TESTING
AIR & WATER POLLUTION-SOLID WASTES SAMPLING - ANALYSIS - CONSULTING

Telephone (219) 464-2389

2400 Cumberland Drive Valparaiso, Indiana 46383

#### LABORATORY REPORT

CLIENT E. I. DuPont & DeMemours	DATE December 27, 1985
ATTENTION Mr. John Orban	PHONE977-4619
ADDRESS 5215 Kennedy Avenue, East Chicago, IN 46312	
SAMPLE COLLECTED BY DuPont & DeNemours Personnel	

SAMPLE NAME: Silica Base Solids

SAMPLE DATE: November 25, 1985

TOTAL CONSTITUENT ANALYSIS

(Original Sample)

EP TOXICITY

Performed according to EPA SW-846. All leachate results determined by Method of Standard Additions

PARAMETER	<u>RESULIS</u> (mg/kg)	<u>PARAMETER</u> EP Leachate	RESULIS	EPA MAXIMUM CONCENTRATION
Arsenic	0.389	Total Chromium	89.6	5.0
Barium	49.9			
Cadmium	8.8	Hexavalent		
Chronium	2620	Chronium	89.6	
Lead	15.3			
Mercury	0.29			
Selenium	1.25			
Silver	(4.2			
Copper	15.1			
Nickel	26.4	Leachate Condition	ns	
Zinc	81.5		<b></b>	
Total Cyanide	<0.5	#ZSolids: N/A	Grams Sam	ple Extracted: 100
		Initial pH: 12.5		etic Acid Added (mLs): 400
		Final pH: 9.4		ionized Water Added (mLs): 1600
•	•			•

#As per SW-846 Method 1310 N/A = Non-applicable

ALL RESULTS REPORTED IN MG/L UNLESS OTHERWISE NOTED

les

DEC 0010323

Manager of Technical Services



ENVIRONMENTAL CONSULTING AND TESTING
AIR & WATER POLLUTION-SOLID WASTES SAMPLING - ANALYSIS - CONSULTING

Telephone (219) 464-2389

2400 Cumberland Drive Valparaiso, Indiana 46383

#### LABORATORY REPORT

CLIENT E.I. DuPont DeNemours & Co.	DATE November 26, 1985
ATTENTION Mr. John Orban	PHONE
ADDRESS 5215 Kennedy Ave., East Chicago, IN	DATE OF SAMPLE RECEIPT
SAMPLE COLLECTED BY DuPont Personnel	October 24, 1985 (2427)

PARAMETER	RESULTS	chaques + ext flue out	Brian Noe - CHERNON
	Powder 10/24/85	3/15/84	11/25/85
Chromium	1800	1280 SO TOTAL 55 HOR	2620 TOME = 8.1 NOTE 89
Arsenic	25	20	0.319
Cadmium	77.5	200	8.8
Lead	590	270	15.3
Selenium	5.3	4.5	1.25
Zinc	134	150 -	81.5
Copper	18	25	15.1
Hg		60	0.29 26.4
CA		<5	<0.5
ALL RESULTS REPORTED IN MG/	KG UNLESS OTHERWISE NO	TED /30 -	<del></del>

Approved by \_\_\_

akf

DEC 0010323 Manager of Operations

#### EAST CHICAGO INDIANA

#### UNUSUAL INCIDENT

LOCATION: Barrelhouse

Date: 11/14/89

INCIDENT: Approximately 20,000 pounds of "Ludox" AM was pumped

to the ground through an open transfer line.

INJURIES: None

PROPERTY DAMAGE: None

#### BACKGROUND:

When finished product is transferred from the "Ludox" Department to the Barrelhouse, the "Ludox" operator is required to check the receiving tank after starting the transfer pump. This is done to insure that the product is going into the proper tank.

When a "Ludox" storage tank is prepared for entry, a skillet type blank is inserted into the "Ludox" transfer line at the nearest flange to the storage tank. This blank is removed and the transfer line is bolted back together before the tank is put back in service.

#### **DISCUSSION:**

On Tuesday November 14, 1989 a "Ludox" operator pumped approximately 20,000 pounds of "Ludox" AM through a transfer line that was not hooked up to any tank. He was attempting to deliver the product to # 5 Storage Tank. The transfer line was disconnected at a flange near the top of the storage tank. The product was pumped through the open line to the ground and eventually drained into the plant sewer.

Storage Tank # 5 had been out of service for cleaning. When the tank was prepared for entry, the skillet blank installed in the "Ludox" transfer line was not bolted tightly in place. When the storage tank was put back in service, this transfer line was not put back together.

The "Ludox" department was informed that the storage tank was ready to receive product before any material transfer was attempted. When the "Ludox" operator started to transfer the material, he did not check to see that the material was going to the proper tank.

The procedure in recent history for preparing tanks and putting them back in service has been to rely on the experience of the people doing the job to take the necessary steps.

#### **CONCLUSIONS:**

The combination of three errors led to this event.

- 1) When the storage tank was prepared for entry the blank in the "Ludox" transfer line was not installed properly.
- 2) When the storage tank was put back in service the "Ludox" transfer line was not hooked back up.
- 3) When the "Ludox" operator started to pump material to the storage tank he failed to check and see that the product was indeed going to the tank.

Had either of the first two items been done properly this would have been a "Non-event". If the third item had been done according to procedure there would have been significantly less product lost.

The current unwritten procedures for tank entry preparation and for putting those tanks back in service has worked well in the past but, it did contribute to this event.

#### RECOMMENDATIONS:

- o Evaluate the current written procedure for tank entry preparation and recommend changes if necessary to prevent the reoccurrence of this or any other similar event. (Resp. JJB, AJH, PMW Timing 12/15/90)
- o Re-emphasize the importance of checking the receiving tank after starting a transfer to all "Ludox" operators. (Complete)

#### INVESTIGATED BY:

- J. J. Bagnato
- P. King

# INCIDENT REPORT EAST CHICAGO PLANT

		Preliminary		Issue Date	8/7/91
	[X]	Final		INCIDENT REPOR	T NO. 1991-8
-	[ ]	SAFETY	[X] ENVIRONMENTAL [ ] Category A	, [	] OTHER ] Vendor
		IDENT POTENTIAL	[ ] Category B	اً ا	Contractor
	[ ]	MINOR SERIOUS	[X] Category C Chemical Released	ا Sodium Silic	ate 2.5 Ratio
-		SERIOUS PROCESS	Quantity Released	About 50,000	lbs.
	INC:	IDENT DATE <u>August 3,</u> A: <u>Silicate/Barrelh</u>		: <u>Approximate</u> PMENT: #10 Sil	
	INC:	IDENT CLASSIFICATION Injury Incident, No Injury Fire Explosion Spill Leak Plug Process Upset Exposure Other	PROCESS H [ ] Opera [ ] Emerg [ ] Inspe [ ] Inter [ ] Equip [ ] Test [ ] Train [ ] Seric [ ] Chang [ ] Pre-S [ ] Proce	AZARDS MANAGEME ting Procedures ency Preparedne ection & Test Procedures lock Testing & ment Integrity Authorization aing & performan ous Incident Inverse in Design etartup Safety Ress Safety Infor	NT DEFICIENCY (None) ss ogram Procedures  ce estigation eview mation
	trai	EF DESCRIPTION OF INC nsfer of settler of 2 rage (22 grade). App 11.6) overran tank.	2 grade to #10 sto roximately 50,000	rage (F grade) lbs. of 2.5 rat	instead of #8 io silicate
	IMMI	EDIATE STEPS TAKEN TO	CORRECT DIFFICULT	Y:	
		nsfer was diverted to ll so waste treatment			
	BAS	IC CAUSE OF INCIDENT:			
	Fail	lure of operator to the lure to verify materiate the tank).	hink through trans al was transferrin	fer before it w g to the proper	as started. tank (by looking
	REC	OMMENDATIONS TO PREVE	NT RECURRENCE:		
	Revi	iew with area personne k to verify transfer.	el in Silicate and	"Ludox" the ne	ed to look into
	KEY	LESSONS FROM THIS IN	CIDENT:		•
	Proc	cedures need to be mo	re strictly adhere	d to.	
	DO 3	YOU RECOMMEND A MORE	DETAILED INVESTIGA	TION: [ ] YES	[Х] ио
		SONS INVESTIGATING IN			· · ·

## INCIDENT REPORT EAST CHICAGO PLANT

[ ] Preliminary	Issue Date <u>9/25/91</u>
[X] Final	INCIDENT REPORT NO. 1991-9
[ ] SAFETY  INCIDENT POTENTIAL [ ] MINOR [X] SERIOUS [ ] SERIOUS PROCESS	[X] ENVIRONMENTAL [ ] Category A [ ] Category B [ [ ] Contractor [X] Category C [X] Category C [X] Category C [X] Category C [ About 200 pounds
INCIDENT DATE 9/16/ AREA: EVC	91 TIME: 5:00 AM EQUIPMENT: Filter Feed Tank
<pre>INCIDENT CLASSIFICATION [ ] Injury [ ] Incident, No Injury [ ] Fire [ ] Explosion [X] Spill [ ] Leak [ ] Plug [ ] Process Upset [ ] Exposure [ ] Other</pre>	PROCESS HAZARDS MANAGEMENT DEFICIENCY  [ ] Operating Procedures  [ ] Emergency Preparedness  [ ] Inspection & Test Program  [ ] Interlock Testing & Procedures  [ ] Equipment Integrity  [ ] Test Authorization  [X] Training & performance  [ ] Serious Incident Investigation  [ ] Change in Design  [X] Pre-Startup Safety Review  [ ] Process Safety Information

#### BRIEF DESCRIPTION OF INCIDENT AND PERTINENT FACTS:

The EVC operator was filling the new filter feed tank, in preparation for a start-up of the new filter press. The filling procedure requires manually balancing flow to the filter feed tank and to the rotary filter pans and visually inspecting the level as there are no remote level indications. After starting the feeds earlier in the 11:30 X 7:30 shift, the operator inspected the filter feed tank level hourly. At 4 am however, he assumed that a visual inspection was not required, as earlier inspections indicated a slow increase in level, and he assumed the decanting line back to the clarifier was open. At 5 am he discovered the filter feed tank overflowing to the ground, outside the normal spill containment of the area. This material consisted of about 4% silicate solids in a waster solution at a pH of 10.5 - 11.0.

The decanting line to the clarifier has two automatic diverting valves which were both closed at the time of the incident. These valves were installed as part of an impending project to decant clear process water from the filter feed tank to the pH adjust tank. A pre-start-up inspection of the piping without the diverting analyzer was conducted. The "air-failure" position of these diverting valves was not verified as correct.

#### IMMEDIATE STEPS TAKEN TO CORRECT DIFFICULTY:

The EVC operator stopped the feed into the tank and drained additional liquid out of the bottom of the tank to the internal sewer to waste treatment. He then proceeded to collect the spilled material for removal to the landfill.

The diverting valve in the decanting line to the clarifier was changed to the open position, permitting flow to the clarifier.

#### BASIC CAUSE OF INCIDENT:

Misjudgement of operating conditions Failure to verify process flows Oversight in pre-start-up evaluation

#### RECOMMENDATIONS TO PREVENT RECURRENCE:

Publicize incident

- by this report
- review in EVC safety meeting

Review proper operating practice of verifying process flows to all vessels.

Install a high level alarm and interlock on the total tank level to prevent overflow of tank.

Install a properly sized overflow to the plant waste treatment system.

#### KEY LESSONS FROM THIS INCIDENT:

Process operations must be monitored at appropriate intervals by area operators; especially, on new facilities.

Pre-start-up reviews' depth of evaluation should increase with frequency/experience.

DO YOU RECOMMEND A MORE DETAILED INVESTIGATION: [ ] YES [X] NO

#### PERSONS INVESTIGATING INCIDENT:

- O. J. Meyer
- R. T. Larson
- W. W. Leoniy



E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS AND PIGMENTS DEPARTMENT

bcc: M. Mooney, Legal, Wilm. J. M. Pierrard, C&P, Wilm. D. V. Lucke, C&P, E. Chgo. C. A. Cremeans, C&P, E. Chg

70606

October 29, 1984

Program Support Branch Water Pollution Control Division 1330 West Michigan Indianapolis, Indiana 46206

NPDES Permit No. IN0000329

#### Gentlemen:

As required by the DuPont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on October 23, 1984. The daily maximum discharge of 900 pounds of suspended solids was exceeded when 1610 pounds were discharged. The discharge resulted from a mechanical failure of the turbidity meter which failed to detect a process upset in the filtration system. Both conditions were promptly corrected and we do not expect further problems of this nature.

Sincerely,

M. 2. Zatorski Senior Supervisor Production

cc: Director, Enforcement Division, Re Environmental Protection Agency 230 South Dearborn Street Chicago, Illinois

Parfort's

Perent

NPDES Permit

Violations

Packet #33

CH-1046 REV. 11/80

E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS AND PIGMENTS DEPARTMENT

E-W-5116

bcc: M. Mooney,

Legal, Wilmington J. M. Pierrard,

C&P,

Ħ East Chicago

(D. V. Luebke, (C. A. Cremeans,



70600

March 21, 1984

Program Support Branch Water Pollution Control Division 1330 West Michigan Indianapolis, Indiana 46206

NPDES Permit No. IN0000329 RE:

#### Gentlemen:

As required by the DuPont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on March 16, 1984. The daily maximum discharge limitation of 300 pounds for ammonia-nitrogen was exceeded when 700 pounds were discharged. excursion resulted from exceeding the capacity of the Sulfamic Acid Operation holding basins following a series of unscheduled process discharges. The pH limits were not exceeded. We are again reviewing our operating procedures to insure adequate capacity to accommodate unforseen process upsets.

Sincerely,

P. R. Johnston Senior Supervisor

Safety, Health & Environment

PRJ/dkl 0280B

Director, Enforcement Division, Region V Environmental Protection Agency 230 South Dearborn Street Chicago, IL 60604



E-W-511)

70600

### E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS AND PIGMENTS DEPARTMENT

Program Support Branch Water Pollution Control Div. 1330 West Michigan Indianapolis, Indiana 46206

Re: NPDES Permit No. 1N0000329

Gentlemen:

As required by the DuPont Plant's NPDES permit we are notifying you of an excursion which occurred between noon and 1 PM on January 22, 1984. The PH of 002 outfall averaged 9.1 for the hour versus a permit limitation of 9.0 for any one hour. The cause of this excursion was the failure of a by pass valve in our recycle system. We have repaired this valve and reviewed the incident with all involved. We do not expect further problems of this nature.

January 24, 1984

bcc: M. Mooney, Legal, Wilm.

J. W. Jenny, C&P, Wilm.

D. V. Luebke, C&P, E. Chgo

C. A. Cremeans, C&P, E.C.

Sincerely,

S. M. Birkel Senior Supervisor

Safety, Health & Environmental

CC: Director, Enforcement Division, Region V Environmental Protection Agency 230 South Dearborn Street Chicago, Illinois 60604

SMB:pjp

E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

S. A. Tasher, Legal, Wilmir ton
S. S. Ulrey, C&P,

(D. V. Luebke, "East Chicac
(R. J. Libutti, """

File: TAC 12.4

70300

70600

CHEMICALS AND PIGMENTS DEPARTMENT

October 26, 1981

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

RE: NPDES Permit No. IN 0000329

#### Gentlemen:

CH-1046 REV. 11/80

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit we are notifying you of an excursion which occurred during the morning of October 22, 1981. The pH of 002 outfall averaged 9.4 for the hour between 1:00 a.m. and 2:00 a.m. versus a permit limitation of not more than 9.0 for any one hour. The cause of this excursion has not been definitely determined other than there was an apparent operator error in trying to run the two-stage pH control system. We have reviewed this incident with both the operator and his supervision so as to avoid future excursions.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS/ay

cc: Sandra S. Gardebring

Director, Enforcement Division, Region V

Environmental Protection Agency

230 South Dearborn Street

Chicago, IL 60604



E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

bcc: B. J. Reilly,

E. L. Crow, (D. V. Luebke, Legal, Wilmington C&P,

East Chicago

(File TAC 12.4

J. Angiulle.

4

CHEMICALS, MAND PIGMENTS DEPARTMENT

August 25, 1980

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN 0000329

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on August 20, 1980. The daily maximum discharge limitation of 300 pounds for ammonia-nitrogen was exceeded when 610 pounds were discharged. To prevent a runaway reaction of a "premix" batch from our sulfamic acid operation, it was necessary to discharge the batch. The emergency pit designed for this contingency was not available as some material from an earlier problem had been contained in the pit. The pH limits were not exceeded.

We have been aware that this type of incident could occur and are in the process of enlarging our emergency pit so that it will have more capacity to prevent this type of occurrence in the future.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS/ay

James O, McDonald Director, Enforcement Division, Region V Environmental Protection Agency 230 South Dearborn Street Chicago, IL 60604

REV. 8-79

bcc: B. T. Reilly, E. 🚣 Crow,

D. V. Luebke, R. I Ameinio.

Legal, Wilmington CD&P, 11

East Chicago

#1

(D. D. Andrews, (File TAC 12.4

70600

E. I. DU PONT DE NEMOURS & COMPANY

5215 KENNEDY AVENUE EAST CHICAGO, INDIANA 46312

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

June 30, 1980

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN 0000329 RE:

Gentlemen:

As required by the Du Pont East Chicago, Indiana plant's NPDES Permit we are notifying you of oil and grease excursions on June 24 and 25. The daily grab samples of our 001 outfall were 28 and 12 mg/l respectively for oil and grease versus an NPDES permit limitation of 10 mg/l maximum. A second sample taken on June 24 was 9 mg/l as was the daily grab samples taken on June 26 - both within the permit limit.

These excursions are apparently a continuation of the problem which developed on June 17 and which was reported to you in my letter of June 25. We now believe that the cause of the latest excursions as well as those on June 17-19 was a high oil and grease level in the incoming water from the Grand Calumet River. We base the conclusion on two factors:

- Grab samples of the incoming water from the river taken on June 24 and 25 analyzed in the range of 8-10 mg/1 oil and grease.
- We have made no process changes in our operation. Our record of performance for the past 13 months involving more than 400 daily grab samples shows no excursions above the 10 mg/l limit and an average oil and grease discharge from 001 outfall of only 2.1 mg/1.

Program Support Branch
Water Pollution Control Division
June 30, 1980
Page 2

We are continuing to investigate this problem to confirm this conclusion. If true, there is no way we can avoid having more excursions for oil and grease if the incoming water is near or above our permitted limit.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS/dlm

cc: James O. McDonald

Director, Enforcement Division, Region V

Environmental Protection Agency

230 South Dearborn Street

Chicago, IL 60604

OUPOND COUPOND

### E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

C. B. Everett, Legal, Wilmington
P. F. Brown, CD&P,
D. V. Luebke, "East Chicag
P. J. Angiullo, """

(File: TAC 12.4

70600

December 14, 1979

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

RE: NPDES Permit No. IN 0000329

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana plant's NPDES Permit we are notifying you of pH excursions which occurred on December 8 and December 9, 1979. When analyzed by our laboratory on December 10, the pH of the grab samples of our 001 outfall were 3.5 and 3.9 respectively versus an NPDES permit limitation of 6.0 minimum.

The cause of this excursion was a small leak in a sulfuric acid cooler which dripped into the non-contact cooling water discharge. Process instrumentation had indicated a problem. After attempts to find a leak were unsuccessful, our operating personnel concluded that the cause was an instrument malfunction. Further investigation revealed the leak and it was isolated and repaired.

We are reinstructing our operating personnel on the proper techniques in identifying small cooler leaks and in verifying process instrumentation so that incidents of this type will be minimized.

Sincerely,

J. T. Sixsmith
Environmental Control
Coordinator

JTS/ay

cc: James O. McDonald
Director, Enforcement Division, Region V
Environmental Protection Agency
230 South Dearborn Street
Chicago, IL 60604

12/8 3820 GPM 12/9 3900 GPM

e at pH 3-4 = 100 mg/R H2504

1 leter = 0.2642 galloris 1 gallon = 3,785 leters

1 # = 454 gms = 454,000 mg

100 mg x 1# x 3.785 x 3900 gallon x 60mm 28 inc e 454,000 mg gallon min x min x min Day

= 4700 #/Day

1 got/MIN = 10# = 14,400 #/DAY (OJ Meyers estimate)

on 1 mg/1 z ,00000834#/

100 mg/l = ,000834 #/

1000834 x 3900 GPM = 3.25 # x 1440 = 4680 #/DAY

	DON'I SAY II-WRITE II & DV WEBSILE
10 RCOIT	Location CDH, Wilm LA Keener
From SIXSm 17d	Location // E. Clfrc Phone No.
Subject plt Inciden	\$ AT 001 OUTPALL Date 12/14/7
CONFIRMING	our convensation today, you toco me
that the Ince	sents or Low pt pt pt 001 on 12/8 pmp
is a well re	nontable AS NPDES VIOLATIONS BUT
L ACLARA T UN	Den THE Spill Regulation (511) will
in 1905 15 TO	(Ne sue reportino 11452 10
State + Region	V By leath lopay 13
By our NPDES	permito Sts
G-88 REV. 10-62	IF CONFIDENTIAL, TEAR UP BEFORE YOU DISCARD!



E. I. DU PONT DE NEMOURS & COMPANY

5215 KENNEDY AVENUE EAST CHICAGO, INDIANA 46312 bcc: B. J. Rei'ly, E. C. Crow, D. V. Luebke, R. J. Angenido, (D. Andrews, (File TAC 12.4

Legal, Wilmington CD&P, East Chicago 11

"

70600

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

June 25, 1980

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN 0000329

#### Gentlemen:

1046 REV. 3-79 مريز

As required by the Du Pont East Chicago, Indiana plant's NPDES Permit we are notifying you of oil and grease excursions on June 17, 18, and 19. The daily grab samples of our 001 outfall were 37, 14, and 18 mg/l oil and grease versus an NPDES permit limitation of 10 mg/l maximum. We do not yet have an assignable cause for these excursions other than the non-contact cooling water which discharges from 001 had been shut down for about a week while annual maintenance was being done on our sulfuric acid unit. Conceivably some accumulation of oily sediment which is carried with the river water was dislodged during the startup on June 17 and took several days to dissipate. A second grap sample taken on June 19 was within limits (10 mg/l) and the sample on June 20 was back to a more normal reading (1.6 mg/l).

We are continuing to investigate the incident including the possibility that the problem is an analytical one so that future excursions can be avoided.

Sincerely,

Environmental Control

Coordinator

JTS/arg

cc: James O. McDonald Director, Enforcement Division, Region V

Environmental Protection Acency

230 South Dearborn Street

Chicago, IL 60604

6/26/80

TO:

E. CROW

- CD&P, WILM.

E. I. DU PONT DE NEMOURS & COMPANY

FROM:

J. SIXSMITH - " E. CHGO.

EAST CHICAGO, INDIANA 46312

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

June 25, 1980

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN 0000329

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana plant's NPDES Permit we are notifying you of oil and grease excursions on June 17, 18, and 19. The daily grab samples of our 001 outfall were 37, 14, and 18 mg/l oil and grease versus an NPDES permit limitation of 10 mg/l maximum. We do not yet have an assignable cause for these excursions other than the non-contact cooling water which discharges from 001 had been shut down for about a week while annual maintenance was being done on our sulfuric acid unit. Conceivably some accumulation of oily sediment which is carried with the river water was dislodged during the startup on June 17 and took several days to dissipate. A second grab sample taken on June 19 was within limits (10 mg/l) and the sample on June 20 was back to a more normal reading (1.6 mg/l).

We are continuing to investigate the incident including the possibility that the problem is an analytical one so that future excursions can be avoided.

Sincerely,

Olid by plone by Ed Crow on 6/27/80

J. T. Sixsmith Environmental Control Coordinator

James O. McDonald Director, Enforcement Division, Region V Environmental Protection Agency 230 South Dearborn Street Chicago, IL 60604

CH-1046



### E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

R. J. Angiullo, I A. Kremer, TAC 12.4 (File:

bcc:

70600

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

December 3, 1979

P. F. Brown,

V.Luebke,

C. B. Everett, Legal, Wilmington

CD&P,

East Chicac

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN0000329 RE:

Gentlemen:

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on November 21, 1979. The daily maximum discharge limitation of 200 pounds for  $BOD_5$  was exceeded when 220 pounds were discharged. The cause of this excursion is not known since no apparent spills or unusual discharges occurred.

We are reviewing our analytical procedures for  ${\tt BOD}_{\tt S}$  to determine if the possible cause of this excursion could be in the analyses.

Sincerely,

J. T. Sixsmith Environmental Control

Coordinator

JTS/dkl

James O. McDonald Director, Enforcement Division, Region V Environmental Protection Agency 230 South Dearborn Street Chicago, IL 60604

C. B. Everett, Legal, Wilmington

TAC 12.4

P. F. Brown, D. V. Luebke,

East Chicago

J. Angiullo,



E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

(File:

70600

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

November 1, 1979

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

NPDES Permit No. IN 0000329 RE:

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on October 29, 1979. The daily maximum discharge limitation of 300 pounds for ammonia-nitrogen was exceeded when 410 pounds were discharged. A sulfamic acid reactor shutdown and washout necessitated by a water leak was the source of the discharge. A substantial amount of material was contained in the emergency pit designed for this contingency. However not enough material was contained to prevent the permit excursion. The pH limits were not exceeded.

We are reviewing again our opérating procedures including revisions to the emergency pit so as to prevent excursions of this type.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS/ay

James O. McDonald

Director, Enforcement Division, Region V

Environmental Protection Agency

230 South Dearborn Street

Chicago, IL 60604

Januar 11/16 1:05 PM

20: 0.7. Brown - EDIP, Wilm From: g. T. Sixsmiti - " E.C.

November 1, 1979

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

RE: NPDES Permit No. IN 0000329

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit, we are notifying you of an excursion which occurred on October 29, 1979. The daily maximum discharge limitation of 300 pounds for ammonia-nitrogen was exceeded when 410 pounds were discharged. A sulfamic acid reactor shutdown and washout necessitated by a water leak was the source of the discharge. A substantial amount of material was contained in the emergency pit designed for this contingency. However enough material was not contained to prevent the permit excursion. The pH limits were not exceeded.

We are reviewing again our operating procedures including revisions to the emergency pit so as to prevent excursions of this type.

Sincerely,

J. T. Sixsmith
Environmental Control
Coordinator

JTS/ay

cc: James O. McDonald
Director, Enforcement Division, Region V
Environmental Protection Agency
230 South Dearborn Street
Chicago, IL 60604

OKO On plune by Pek Brown on 11/5/79 E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

bcc: C. B. Everett, Legal, Wilmington P. F. Brown, CD&P, "

D: V. Luebke,

"\_\_\_East Chicago

(File: TAC 12.4



70600

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

August 9, 1979

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

RE: NPDES Permit No. IN 0000329

#### Gentlemen:

As required by the Du Pont East Chicago, Indiana Plant's NPDES Permit we are notifying you of an excursion which occurred during the night of August 6, 1979. The pH of 002 outfall averaged 5.7 versus a permit limitation of not less than 6.0 for the hour between 12 midnite and 1:00 a.m. The cause of this excursion has not been definitely determined other than there was an apparent instrument malfunction in the two-stage pH control system at the outfall. When the investigation is complete, replacement or repair of the instrument which malfunctioned will be made. We will continue to carry out preventative maintenance on our equipment in the future to minimize future violations.

Sincerely,

Driginal signed by

J. T. Sixsmith
Environmental Control
Coordinator

JTS/ay

cc: James O. McDonald

Director, Enforcement Division, Region V

Environmental Protection Agency

230 South Dearborn Street

Chicago, IL 60604

E. I. DU PONT DE NEMOURS & COMPANY

EAST CHICAGO, INDIANA 46312

CHEMICALS, DYES AND PIGMENTS DEPARTMENT

CD&P, P. F. Brown, D. V. Luebke, East Chicago

bcc: C. B. Everett, Legal, Wilmington

L. A. Kremer,

TAC 12.4 File:

70600

May 11, 1979

Program Support Branch Water Pollution Control Division 1330 West Michigan Street Indianapolis, IN 46206

RE: NPDES Permit No. IN 0000329

#### Gentlemen:

As specified in the Du Pont East Chicago, Indiana Plant's NPDES Permit we are notifying you of an excursion which occurred on May 9, 1979. The pH of our 002 outfall averaged 4.9 for the 1 hour period of 11 a.m. - 12 Noon versus a permit limitation of not less than 6.0. The cause of this excursion was the inability of our pH control system to function properly during a City water curtailment. The flow to the two-stage pH adjust system and sub-sequently to the outfall was so reduced (only a few gallons per minute) that the control system could not respond. We were able to correct this imbalance by temporarily getting an additional water supply from our fire main system. In the future we will prevent a recurrence of this type by getting an additional water supply to the system more promptly.

Sincerely,

J. T. Sixsmith

Environmental Control

Coordinator

JTS/ay

James O. McDonald

Director, Enforcement Division, Region V

Environmental Protection Agency

230 South Dearborn Street

Chicago, IL 60604

TRANSMITTED VIA TELECOPIER 8/31/76 @ 3:25 P.M.

East Chicago, Indiana August 31, 1976

20600

TO:

P. Gilby

ICD, Wilmington

FROM:

J. T. Sixsmith

ICD, East Chicago

SIS

On August 25 an incident occurred which resulted in a one-hour average pH of 9.4 at the 002 outfall. The complex instrument system which should automatically control the outfall pH within permit limits operated erratically. Prompt action by our operating personnel brought the system back into control during the following hour. This erratic operation caused the daily composite sample to be non-representative and explains the apparent high suspended solids reported on that day. We do not believe that an excessive amount of suspended solids was discharged in our effluent on August 25, but that the solids were formed in the sampling system as a result of the pH control problem.

JTS:ik



E. I. DU PONT DE NEMOURS & COMPANY

WILMINGTON, DELAWARE

on Schlieben-Orchem-Wilm.

J.C. Muller-I&B-Wilm.

J.L. Quinn- " H.H. Stuart-R.O. Brock-Orchem-E. Chicago

> S MOR OFF. ST CHICAGO

ANAIGH

J.H. Brown-I&B-E. Chicago

R.C. Atkins-" " (3)

Always Files.S.D.-E. Chicago

J.A. Happrock Design ENGINEERING DEPARTMENT RC 13

November 6, 1962

R. D. GOTWALS (2) ORCHEM DEPT. KCH CM CHAMBERS WORKS

ORCHEM DEPT. - EAST CHICAGO - PROJECT 9499 WASKE - APPROVAL FOR HC1 DISCHARGE

Of August 6, 1962, approval was requested of the Indiana Stream Pollution Control Board to discharge unneutralized by-product

HCl to the Grand Calumet River from the East Chicago plant.

Attached herewith is a letter, dated October 31, 1962, from Mr. B. A. Poole, Technical Secretary, indicating that the Board considered the proposed discharge to be satisfactory subject to the following conditions:

1. Final plans are submitted to the Board for approval.

This refers to the plans for the waste dilution and diffusion system in the river.

The present monthly report from East Chicago to the Board will be expanded to include waste acid releases and the chloride and alkalinity concentrations above and below the plant.

The existing monthly report includes waste discharge data from the sulfamic acid operation. This reporting was discussed briefly with Mr. P. E. Miller of the State Board of Health. They will probably want the monthly reports to show HCl release broken down on a daily basis. Miller indicated that river analyses from samples taken from bridges above and below the plant would probably be satisfactory. The sampling should be quite frequent (possibly daily) until sufficient results to demonstrate the efficacy of the dispersion system are obtained.

The underwater waste diffusion system is approved by the Corps of Engineers because of potential river channel improvements.

BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

The details of obtaining approval from the Chicago District will be worked out with Design Division.

4. Du Pont will be responsible for preventing damage to possible future boat and barge traffic from this acid discharge.

We also recommend that when the waste diffuser system is constructed, tests should be made to confirm the mixing of the waste acid with the river water and establish the area of influence based on pH, alkalinity and chloride measurements. Recommendations on the details of this study will be sent to you at a later date.

ENGINEERING SERVICE DIVISION

L. L. Falk

LLF:cmm Attach.



#### STREAM POLLUTION CONTROL BOARD

1330 West Michigan Street

Indianapolis 7, Indiana October 31, 1962

MErose 3-4420

E. I. du Pont de Nemours & Company, Inc. Engineering Service Division Wilmington, Delaware

Attention: Mr. L. L. Falk

Gentlemen:

Re: Preliminary Proposal for Disposal of Hydrochloric Acid East Chicago, Indiana

The preliminary proposal for disposal of hydrochloric acid by E. I. du Pont de Nemours & Company, Inc., East Chicago, was presented to the Stream Pollution Control Board at its meeting on October 31, 1962.

The Company considered the effect on the Grand Calumet River of neutralization of the excess acid, thereby increasing the hardness and soluble salt loads versus utilization of a portion of the existing natural alkalinity of the river to neutralize the acid thereby increasing only the soluble salt load. The Company is willing to use either method but concluded neutralization using the natural alkalinity is a satisfactory procedure and its proposal is as follows:

- a. Discharge to the Grand Calumet River a maximum of 90,000 pounds/day of chlorides.
- b. At normal river flows of 900 cfs, discharge up to 125,000 pounds/day of unneutralized acid, expressed as CaCO<sub>3</sub>. At 900 cfs, this would utilize about 25 ppm of natural alkalinity (average 110 ppm as CaCO<sub>3</sub>).

E. I. du Pont de Nemours & Company, Inc.

- c. Discharge unneutralized acid at lower river flows (300-400 cfs) that prevail during periods when upstream water sources are reduced such that the river alkalinity will not be decreased below 50 ppm as CaCO<sub>2</sub>.
- d. The installation of an underwater waste diffusion system in order to insure rapid mixing in the river.

The Board considered the preliminary proposal and it is satisfactory with the following conditions:

That final plans be submitted to the Board for approval.

That the monthly reports which are submitted to the Board be expanded to include this discharge. In addition, the report should show chlorides and alkalinity analyses of the river above and below the plant.

That the underwater waste diffusion system should be submitted to the U. S. Corps of Engineers for approval. This approval is required because the Corps has future plans for improvements along the river channel.

That in the event boat and barge traffic.become a reality along the Grand Calumet River in the vicinity of the du Pont plant, precautions will be taken to insure against damages to these vessels by this discharge.

The preliminary proposal was prepared by the Company's engineering staff and it was submitted for review on August 6, 1962.

Very truly yours,

B. A. Poole

Technical Secretary

KAW:mlm

STATE OF INDIANA



STREAM POLLUTION CONTROL BOARD

1330 West Michigan Street Indianapolis 7, Indiana January 2, 1957

3. I. hiPent Do Nexeurs and Company East Chicago, Inciam

Attention: Mr. L. R. Dods

Ocntlcacat

Re: Ornecelli, East Chicago Sulfamie Waste Treatment and Disposal

You are hereby notified that the Stream Pollution Control Board has this second day of Jenuary, 1957, approved the report and plans for treating the vastes from the manufacture of sulfamic acid. The plans and report were prepared by the engineering corvies division of a.l. Dufont De Hemours and Company, and were certified by C. Leisure. The plans and report were submitted for approval on Jecomber 26, 1956.

The wastes from the manufacture of sulfamic acid will be neutralized in a line stone tower, settled in a codimentation basis providing approximately two hours detention time, mixed with cooling water and discharged to the Grand Columnt River.

The plane are approved with the following conditions:

- 1. That monthly reports, covering the volumes and characteristics of the wastes discharged to the Grand Calumet be
  submitted to the Stream Pollution Central Board to insure
  that the waste offluent is consistent with the quantities
  given in the report.
- 2. That construction of the facilities be started before December 31, 1997.

Very truly yours

B. A. Poolo

Tochnical Secretary

iTM/vl Enclosures

DEC 0010924

ee: J. Loi sums, Plant Engineer, East Chicago, Indiana A. J. Parmisore, Williamston, Folamore

001

December 21, 1955

Mr. Perry E. Miller, Chief Industrial Waste Section Division of Sanitary Engineering Indiana State Board of Health 1330 West Michigan Avenue Indianapolis, Indiana

Doar Mr. Miller:

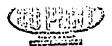
#### Grasselli - East Chicago - Sulfamic Waste Treatment and Disposal

I have reviewed the attached proposal for the disposal of wastes from the facilities for the manufacture of Sulfamic Acid at the Du Pont Company's East Chicago Works. The process and equipment proposed are in accordance with good engineering practice and should result in satisfactory treatment of the wastes described.

· Very truly yours,

CL:V

C. Leicure Plant Engineer



#### E. I. DU PONT DE NEMOURS & COMPANY CETTLE STEED 231 WILMINGTON 93, DELAWARE

CNGINEERING DEPARTMENT

J. A. Georges - " "
L. K. Dods - East Chicago
K. G. Giguerre - East Chicago

H. G. Garner - East Chicago

J. A. Babacak - S. Lukoff, Design E. P. Bartkus

R. W. Smith

R. R. Balmer - E. N. Helmers

H. L. Jacobs File 13

December 11, 1956

Mr. Perry E. Miller, Chief Industrial Waste Section Division of Sanitary Engineering Indiana State Board of Health 1330 West Michigan Avenue Indianapolis, Indiana

Dear Mr. Miller:

## GRASSELLI - EAST CHICAGO - SULFAMIC WASTE TREATMENT AND DISPOSAL

On November 30, 1956, L. K. Dods and I discussed with you the treatment and disposal of wastes from a process contemplated for our plant at East Chicago, Indiana. A tentative copy of a report describing the facilities for the treatment and disposal of the expected wastes was left with you at the time of the above discussion.

As requested by you, we are forwarding herewith sketches of the limestone tower and sedimentation basin. You will note that the sedimentation basin has been changed to rectangular shape. We are also forwarding completed copies of the abovementioned report. As indicated by you, one each of the above enclosures can be returned to us for our files after the Pollution Control Board has acted on our plans.

If you have any questions regarding the report or sketches, please do not hesitate to contact us. If telephoning will expedite matters, you may call us and reverse the charges.

Sincerely,

ENGINEERING SERVICE DIVISION

R. L. Paymons

R. S. Parramore

RSP:mz Attachments

# DESCRIPTION OF SULFAMIC ACID WASTE DISPOSAL FACILITIES

#### General

The waste treatment facilities described in this report are located at the following address:

E. I. du Pont de Nemours & Co., Inc. Grasselli Chemicals Department East Chicago, Indiana

Facilities are provided for the collection and treatment of industrial wastes from a sulfamic acid process. (Sanitary waste is pumped to the City of East Chicago sanitary sewer system.) The waste is neutralized, suspended solids are removed by sedimentation, and the neutralized clarified effluent is discharged to the Grand Calumot River via the plant industrial sewer system (Figure 1). The cutfall for this effluent is located approximately 4,000 ft. east of Kennedy Avenue.

#### Origin of Wastes

The waste is incidental to the operation of a sulfamic acid process. The process has been designed and operating procedures devised to keep the wastes to a minimum.

The waste is composed of cooling water and acid losses associated with the operation of miscellaneous equipment, such as cycloned, pump glands, scrubber separators, and drowning towers. Insoluble solids and sodium dichromate, indigenous to the manufacturing process, are also discarded to the industrial sewer.

### Quantity of Wastes

The following quantities of wastes will be discharged from the sedimentation basin to the river via the plant sever system.

	Sedimentation	Plant	PPM With	After Min River Mo	ing HÖL
Component	Basin Discharge Los./Yr.	Cuttell PPM	100 Sec.79.	200 Sec.Pt.	500 Sac.Pt.
CaSO, Ca (NH <sub>2</sub> SO <sub>7</sub> ) <sub>2</sub> A N Na <sub>2</sub> Or <sub>2</sub> Oh NH <sub>3</sub> * (Equivalent) Flow - gpm	1,601,000 1,655,000 924 970 #/day 700	170 154 .1 35.1 2300	7.5 4.1 1.7	3.8	1.7

## Collection and Trectment Facilities

The waste is collected in a series of tranches that discharge to a dilution sump (Figure 2). Sufficient water is added to keep the sulfate concentration below .1%. This procedure is incorporated to insure

\*Derived from: 250,000 lbs./yr. of (MHL)2 80L 80,000 lbs./yr. of MHLOH

against calcium sulfate precipitating onto the limestone and rendering it ineffective for neutralization. Laboratory tests have shown that sulfamic acid can be neutralized with limestone without difficulty.

The diluted waste is pumped (250 gpm) through a column (6° x 10°) (Figure 3) which is packed with 1/4° high calcium limistons. The effluent will normally have a pH of 5.5 - 7.0. A pH monitoring station is provided. If the pH drops to 5.0, an alarm will sound. Facilities are provided for neutralization of the wastes with armonia during emergencies. Operating instructions for the neutralization system are included in Exhibit A.

The noutralized effluent discharges into a sump. Other process whate averaging 450 gpm also discharges to this samp. The combined waste (700 gpm avg.) flows by gravity to a solimentation basin for resoval of suspended solids. The sedimentation basin (36° x 78° x 4°) provides approximately 2 hours holdup time. Based on operation of similar facilities elsewhere in the dn Pont Company, this is sufficient time to remove the suspended solids.

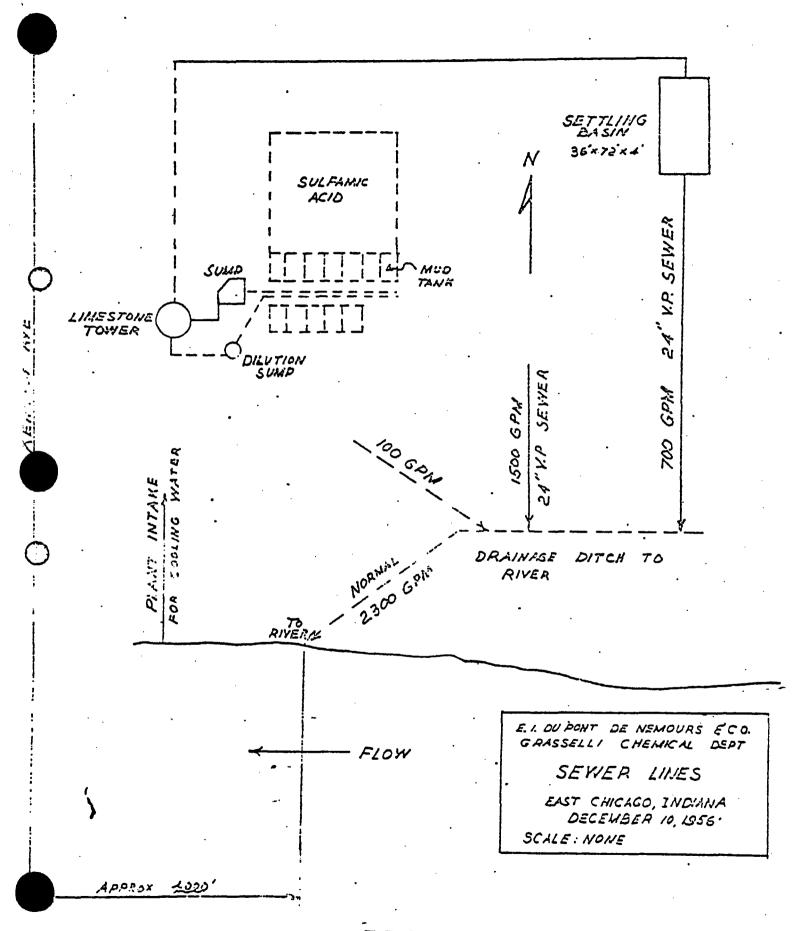
The clarified offluent discharges from the sedimentation begin to a 24" VP sever line which, in turn, discharges to the plant discharges to the plant discharges and mixes with 1,600 gps of cooling water. (Plant acoling water is obtained from the Grand Calumet - see Figure 1.) The contined waste (2,500 gpm) discharges to the Grand Calumet River approximately 4,000 ft. cost of Kennedy Avenue.

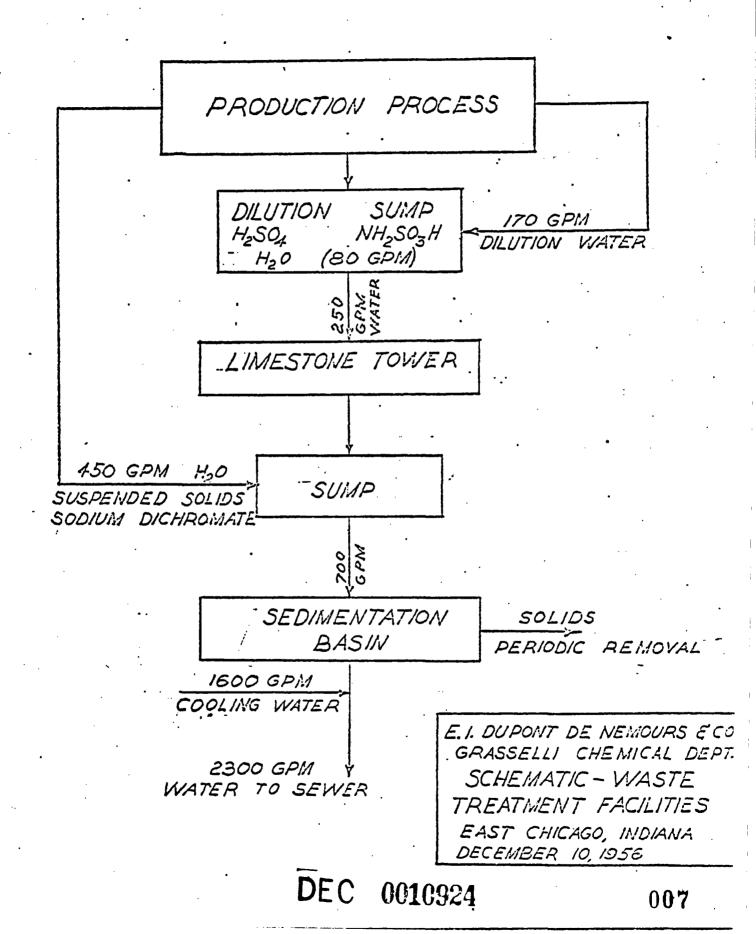
## Characheristics of Effluent

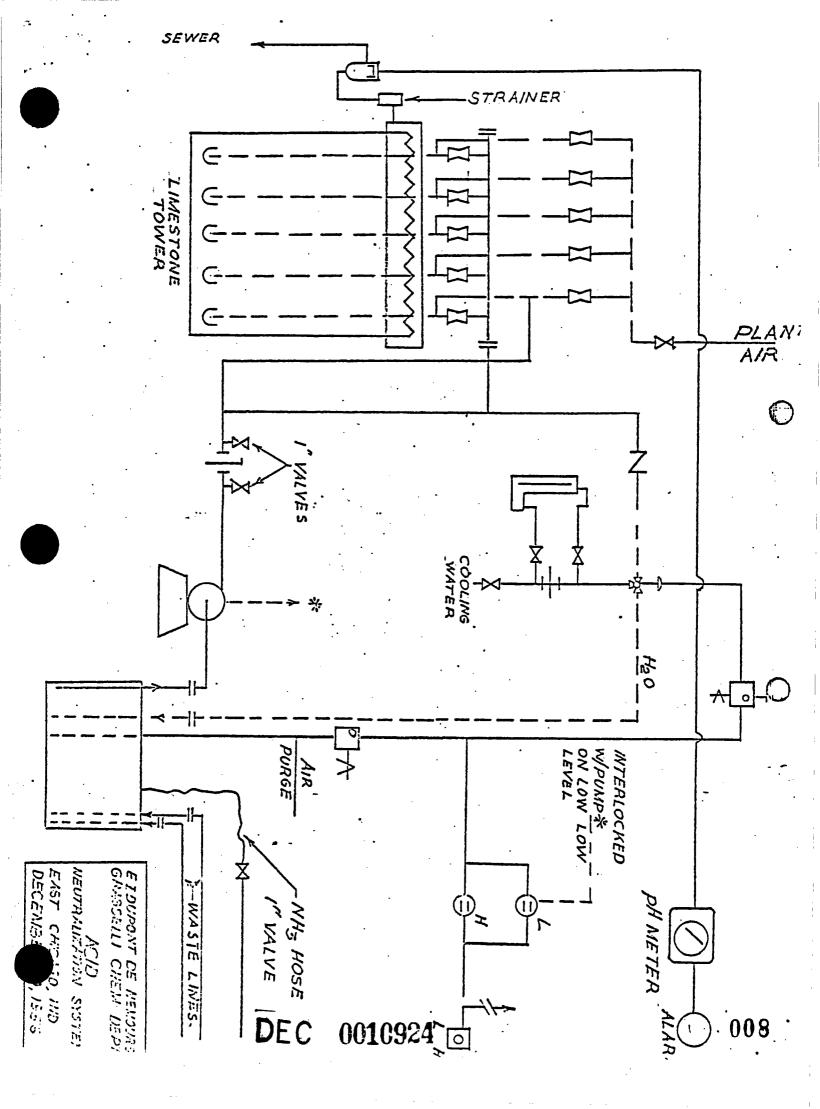
Exhibit B is a tabulation of the projected analysis of the effluent.

The neutralization and solids removal facilities provided for treatment of the wastes from the sulfamic acid production unit will produce
an effluent of good quality.

DEC 0010924







#### WASTE ACID NEUTRALIZATION TENTATIVE OPERATING INSTRUCTIONS

#### 1. FUNCTION OF OPERATION

Waste acids from the process are neutralized by a limestone bed before these wastes are discharged to the river via a plant sewer.

#### 2. RAW MATERIALS

#### 2.1 LIMESTONE

High calcium limestone  $(1/k^n)$  crushed) is used for neutralizing the waste acids.

#### 2.2 WASTE ACIDS

Sulfuric and sulfamic acids are received into a dilution sump for dilution prior to passing through the limestone ted.

#### 2.3 AMMONIA SOLUTION

Ammonia solution is collected in the dilution sump from normal process losses. A separate ammonia line is provided to the dilution sump for emergency use to neutralize excess acids should an equipment failure occur.

#### 2.4 DILUTION WATER

Dilution water to the neutralising pit will be a combination of river water and process cooling water.

## 3. STANDARD PRACTICE

#### 3.1 START-UP

- a. Limestone tower checked for adequate level of limestone.
- b. Process cooling water started to dilution sump.
- c. Ammonia line checked.
- d. pH instrument and alarm system checked.
- e. Acid flows are started to dilution sump.
- f. Dilution water checked to insure adequate dilution.

## 3.2 NORMAL OPERATION

Waste acids are discharged to the dilution sump from an orifice scrubber, a drowning tower, and miscellaneous equipment discharge, such as pump packing, etc. Buring normal operation about 250 gpm of diluted waste acid will be pumped to the limestone bed from the dilution sump. Expected average acid concentrations going to the limestone tower are 0.07% sulfuric and 0.15% sulfamic.

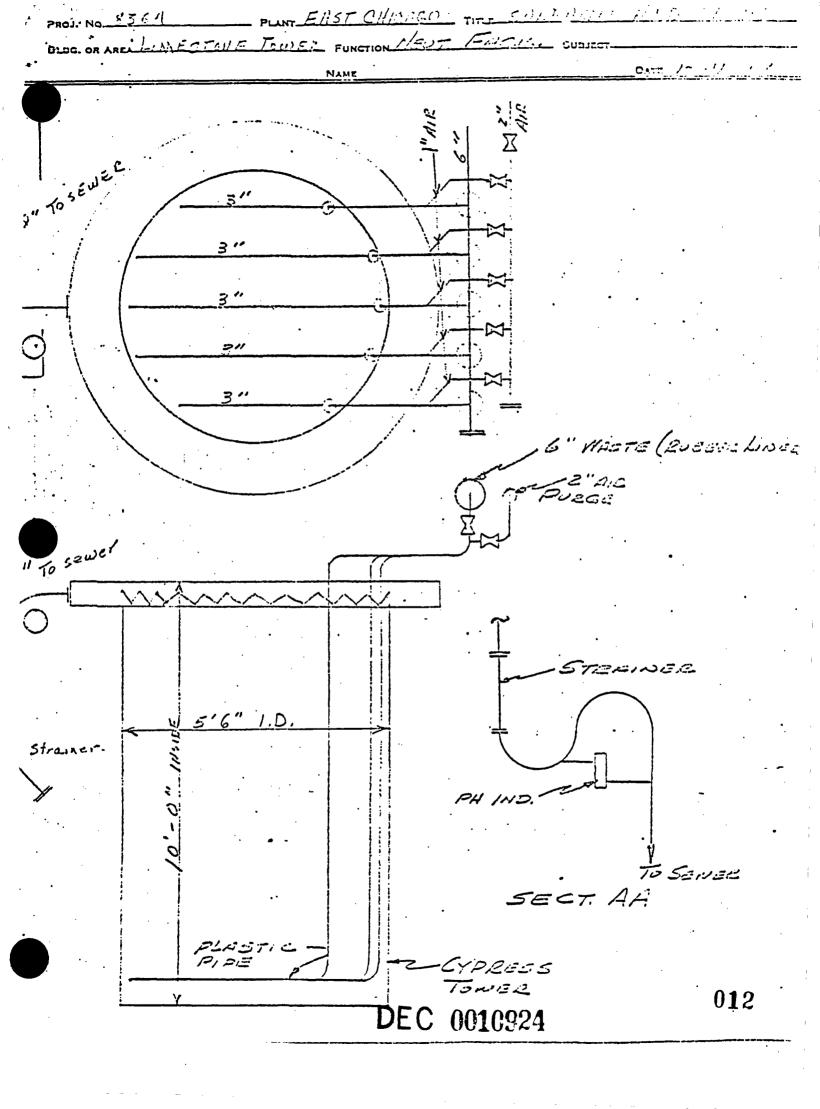
- a. Periodical checks of the acid feed rate to the limestone tower will be made by reading a flow indicator. Adjustments in dilution water additions will be made to maintain flow at 250 gpm ± 50 gpm.
- b. High liquid level in the dilution sump will be detected by a high level alarm installed in the pit. Proper level will be maintained by automatically varying the dilution water addition.
- c. The acid concentration leaving the limestone bed will be controlled by pH measurement. pH range for tower effluent will be 5.5 7. The pH instrument will be equipped with an alarm system set to alert the operator if the pH goes below 5.0. When the pH alarm sounds, the operator will adjust ammonia addition to the dilution sump to bring the pH up into the 5.5-7 operating range. The operator will then correct the unusual process condition and then resume normal operation without ammonia addition. pH will be indicated continuously.
- d. When the limestone level drops to 6 ft., new limestone will be added to the tower, restoring level to 10 ft.
- e. To reduce pressure drop across the limestone ted and remove accumulated sediment from the Grand Calumet River water, the tower will be percolated occasionally using compressed air fed through the liquid distributors.
- f. Settleable solids from the limestone tower are trapped out prior to discharge from the sewer to the river.

## 3.3 SHUTDOWN

- a. Acid flows are stopped to the dilution sump.
- b. Dilution water is continued for several hours to insure thorough limestone bed washing.
- c. Dilution water stopped to sump.
- d. Pump to limestone tower is stopped.

## PLANT EFFLUENT AND RAW RIVER WATER ANALYSIS

	Raw <u>River Water</u>	Plant Effluent
Solids	<u> </u>	PPM
Total	270	44.5
Total Fixed	170	376
Total Volatile	100	70
Total Suspended	100	100
Fixed Suspended	. 40	40
Volatile Suspended	. 60	60
Total Dissolved	170	346
Fixed Dissolved	130	336
Volatile Dissolved	4,0	10.
pH (Range)	·7 - 8	7 - 8
Alkalinity	200	200



DEC 0010924

SECTION A-A'

 $\upsilon$  , 013

CPUHIII MEETING NOTES	PROJECT NUMBER _ L 21838 SHEET   OF 12  NOTES ISSUED BY _ Carl Shank GLO  DATE _ II/Iu/86 REGION
SUBJECT: DuPont Ground Water Asses	somend (DGA)
MEETING DATE: 11/5 - 11/7/56 LOCATION	East Chicago, Inclience
ATTENDEES: Curl Shank  2  2  Vil 67	O.J. Meyer (DuPort)
Pixie Newman Wed & Thurs Sadia Kisson Wed	Andy Howat Fri John Orban Fri
NOTES BY: Carl Shank	640 REGION
TOPICS DISCUSSED	ACTION/NOTES
Plant History provided by O.J	•
Plant started in 1806 by Gra	isselli. Originally a sodium silicute facility.
H2SO4 production by the chan	bes process. Sulfur burned in a
	wood by combistion. The reaction then
stopped due to lack of air. to	ocess formed only low strength acid.
Plant then began to use the	German HoSUA process - Contrat Proces
which involved a cutalyst. The	plant used Vanadium Pentoxide as +
catalyst power to the plant show	ldown.
Throughout the plant operation, the	rev were 5 chamber processes, and -
contact processes Start up of con	stoot processes as follows:
Contact 1- mid 30's Com	tend 2 - 1940; Contact 3 - 1955.
presently being torn down.	in 1984, and the top bly. v
*	
processes. For example salt of	de from the byproducts of the other reaction
	The second secon
ZNaCI +	HSO4 -> 2HU + RN SO

DEC 0010926

## 2HCl + Zn -> ZnCl2 + H2

In 1933, Do?ant purchased the plant from Grasselli, and it prospered until the post-war slump of 1945.

In the early 40's, kinetic themicals were introduced by the U.S. Goo't to produce Freun. Freun required HF & CClq for readounts, and excess and cheap HCl was produced as a by product Will the cheap HCl, the sult cake business fell.

The East Change plant is the safest and plant in the world, with the last lost day acadent on May 18, 1961.

Peuk employment at the facility was 550 > 600 people. Present employment is a 80, with an expected employment of 60 in February

Many Blogs. existed cusite throwst the plants history Blog. demolition is indicated in the parenthese.

Glauber Salt (1940's)

Zn Rousting (Trul Ore)

Sulfide of Soda

TSP (1950's)

Notate of Suda

Hydrofluore Azid (1950's)

Zn (hloride (1955, 1956)

Insectudes (early 1950's)

Ammonium Chloride (1966)

Zn Oxide (1940's)

Sodiem Silicute

1125C

DEC 001032600 1U

COMPUTE MEETING NOTES	PROJECT NUMBER SHEET 3 OF 12  NOTES ISSUED BY REGION  DATE
SUBJECT: D6A	
MEETING DATE: LOCATION	
ATTENDEES:	
NOTES BY:	REGION

TOPICS DISCUSSED ACTION/NOTES
A USS Lead plant is located across the street from the
Dorant pland lead wastes were dumped in a 4' deep x 100 yd
long X 25 yel (estimated) area near the Grand Calomet River.
Lead contamination is now on DoPont property in the
trut your of the main office bldg.
,
The USS lead plant started operation in 1927 (or earlier) and
west out of Gusmess in 1985.
H ( D
thigh Pb concentrations were found in the soil, air and groundwater in the vicinity of the Dorbat plant. Samples were taken in 1985.
In the Vicinity of the Dotant plant. Samples were taken in 1985.
A landfull ter dumping Casoq is located consite, but is
A landfull for lumping CaSUq is located consider but is not licensed by Indiana. The Indiana Dept. of Environmental
Management knows that the dump is being operated, but is
dung nothing about it.
The classes (440)
Total site area is 40 acres, with a portrum containing one of the last privately held dones area.
of the 165 privately held dunes area.

One process still remaining anothe is the Ludox process. Sodium silicate is reacted to form a collocial silica containing 99% H2O and 1% sand

In the process, an un exchange column is word, with acids used for regeneration. Regeneration wastes were put into the tiver (Grand Calumet) in the part.

In 1970, the plant had 13 outfalls into the river. Today, only OUZ and OU3 are used. Print to discharge, all outfalls go into 2-300,000 gullon holding tanks. Line is added for precipitation, polymer added for flocculation, sent to clarities, where sludge to is filtered and cake is then backfilled.

Three water 57stems are installed at the plent.

1. Lake

2. River

3 Fre (lake supply)

Lake Michigan water is used for city water.

4 deep well ( ~ 90') existed at one time, but was abundanced in place. Time of abundanced is unknown.

The discharge from the plant has exceeded In & Fe limits.

At one time, approximately 2000 drums of hozardous wastes were onsite. These were burned w/ county permission.

Second hand intermetrum also indicated PCB's disposed onsite from sterage drums. Dump site (?) may be near Roadways 5 & D. Date of damping not known.

, c			<del></del>	SHEET 5 OF 12
		The state of the s	PROJECT NUMBER	SHEET OF
. "			NOTES ISSUED BY	REGION
9.5		NOTES	DATE	
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10	DE	A	<u> </u>	
- A	ي.برا	(		
	TING	LOCATION		
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	ATTENDEES:			
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AND THE PERSON NAMED IN COLUMN TWO IN COLUMN				
9				
	NOTES BY:		REGION	
71-				
	TOPICS DISCUSSED			ACTION/NOTES
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			+ over earlier wastes,	
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	Faraletine	for all do do	hol buildings exist all	
	1/ /	HOW OVE MENIOUS	NOT SOLITINGS EXIST ALL	. 0001
	the site.			
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	paper ons	ite.		
			· · · · · · · · · · · · · · · · · · ·	
	An EPA	well on the nor	th east end of the site	detected
	Thenus in	the granducter. Il	rese were evidently dumper	L 17. a
		reasote company.		
		veosore company.		
	Rada.	1 11 1 (1		, ,
	mer si	is , bottom as +14	ush, bricks, juk and w	hs knows
	what else we	dumaped in the	nutly area. Coal was be	rned at
	11 1- (	4	/ / /	
·	the site to	√ 40-5 0 years,	and stopped in 1968.	
-				
į	4 1100			
	An HU	dung out boiler	plan down pend, and an	- Antimony
	Lat. 6	Cattley 1		, , , , , , , , , , , , , , , , , , ,
	1ri cuivide	settling bearin are	m120 012 (1T.	

Wastes produced in the Ag. Chem process were shipped to Bell WV for incineration.

Touches (solid) were shipped to Chicago

DEC 0010926.

TOPICS DISCUSSED		ACTION/NOTES
The sanitary	inflow to	the PoTW is a 50 gpm
Various herb		roduced onsite:
	Velpar	
. day - and - and	Hexazinor	
	Linuron Sidoron	
	Tysol	
	Tupersan	
	سميد المقارعة 175 <del>قام السا</del> ر مسرم بيور	
Other products	were:	
CSA (Chlura HCl	Sulfunic Acicl)	
H <sub>2</sub> SO <sub>4</sub>		Ludox
rzza HF		
ZnUz	· ·	
Zn NH3 C	Ž	
Alz Cl3		
Sulfamic	Acid	
Zn cind		
Freon 11		
Freun la	Z,	
TSP		····
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	PROJECT NUMBER SHEET 7 OF 12
	NOTES ISSUED BY
CRAHIII MEETING NOTES	DATE
SUBJECT: DGA	and the second s
MEETING	<u> </u>
DATE: LOCATION_	
ATTENDEES:	
	And the state of t
	and the second s
NOTES BY:	
	REGIÓN
TOPICS DISCUSSED	ACTION NOTES
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,	•
Store roun area -	ges ~ 3,000 gal
Central 2 Feel O.1	~ 3.000 gal
C 1 12 5 601	
Contact 3 Fuel OJ	2 9,000 gal
Roader Fiel C.	
	· · · · · · · · · · · · · · · · · · ·
Trucks were used once no wear	with more remonts taken every home.
and the second s	reasurements taken. Records were
Also beginning and ending r	reasurements taken. Records were
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destryet, so leakage background	TWIN DEBINGO.
A 2 voil and underson f	gas tunk is located at the gate house.
11 5,000 gas walkerouses	ges junic of located as the gar noise.
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4	The second financial contraction of the second contraction of the seco
the settling basin at Koadways	SEF was used to freed of the Freu system. The wask was troated Antimony oxy chlurido.
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23 y which was a by product	of the trem system, the west was meated
with NaOH to precipitate the	Antimony UXY Chluido.
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to the contract the second contract to the contract of the con	a company of the comp
The coding former blow for 1600	in hid ~ 5 15/day of Chrome
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	the state of the s
TOSSU 19TO IT to control THE	water every day when the system

9 Po

but an to be used for storage.

	PROJE	CT NUMBER		SHEET 9 OF	12
	NOTES	ISSUED BY		REGION	
MEETING NOTES	DATE				
SUBJECT: D6A					
SORJECT: DOM					
MEETING					
	ATION		<u> </u>		-
ATTENDEES:					
					- <del>-</del>
					-
NOTES BY:	REGION				
TOPICS DISCUSSED			<del></del>	ACTION 'NO	OTES
MEK Loss car all /		. 10	600 01	. /	
MEK was recovered by	renigerated	CONVENSENS BE	Jure Steam	ejectors.	
From operating manual:					
B/	2400 15/day	)		•	<u>-</u>
	4600 B/c				-
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		ky nechan			
	~ 95 15/0	luy of 700 ,	slowy lost to	o atmosphere	٢
			•		
The system was week	61 for 2	3 1 22 C L	1044 -1	ורנ	
Arn does not remember it	10 100 2-	5 years 110		7/1	
An does not remember it	the system	operatal con	tinuously.		
The following intermetion de	-15 h.c.	ماند مار		le.	
	aus mistag (	a tre six	(DACE/KING	tive	-
mandenence.					-
When repairs for the Z	Balla amas	VALUE OF SPECIMEN	2 hand	de Le	
	c pumps	Were regotter	<u>.,</u>	10.0 B(	
sumped to the ground.					
			· · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·	0	11 11	DIL 1	1 00.6	
An onsite (out only	had he run	nott control.	Kunsty Wood	2 306K	
An cusite coul pile	had he rus	nott control.	Kust wool	JOAK	
An cossite coul pile !	Acid ho run	nott control.	Kust Wood	) 304E	
into the ground.	······································				
into the grand.	······································				
An orsite coul pile Into the ground. When tank overflows or worked sowner, and limesto	······································				

DEC 0010926

009

ACTION/NOTES

At the Zn rowters, the Zn condens were deposited onto the grand and then loaded into hopper cars. If the Zn vocater had operational problems, brown dust would be emitted.

prior to the installation of the process sewers. He feels (Andy) that the tity bldg trenches could have leaked.

After a time, the company installed process sewers and then the sulfamic plant had its own holding pit. It was used to feel spills to the treatment facility to prevent NH3 upots.

Each maintenance shop had its own oil solvent storage Sulfame

Contract Silica

Also stored points and thinners in each location.

Power House

Freun

Ag Chem

Zn U2

Central Shops

Any also reads a certral location for solvent dram storage to the NE of the central shops.

For years, the spent solvents were dumped on the ground. Then in the kete 60's or early 70's, the company prohibited this type of dumping They can have also used "Viking" solvents for cleaning tools

Ludox - Upflow & Consul Processes Sodium Silicate Fluoro Sulfonic Acid (FSA)

DEC

Flue dust from the Ludox process contains some, such ash, and ~1% Cr +6
Dufont ships 10 drains every 2-3 years as a hazardars waste to Dogowate NJ Cotto is from the formace tracky where its explaced by meded wil Cr bricks 0010926

RRA

LAging whole

	NOTES ISSUED BY
MEETING NOTES	DATE
SUBJECT: DGA	
SUBJECT: UOTT	
MEETING	
DATE: LOC	ATION
ATTENDEES:	
NOTES BY:	
	REGION
TOPICS DISCUSSED	ACTION/NOTES
Formuldeligue has been us	sed assite, and used in the Luder process.
The Fermaldehycle was shipp	and in drums and stoved in the Bornel Huse.
Very small grantities were as	
5. h. = 1. H ====	Mal I la la Block
70010m = 1	Metasilicate was made in the Ludox Blog.
It was made betwee 1970	, but is no longer made.
Hydrogen lewxide come in	tank cars from Mempho, and was used in
the 502 scrubber.	
Downel	stabilizer in the Ludox process
was aged as a	STASHICE UN 110 ZUARZ PROCESS
11	
Hexachiorphene was a	brocide in the Ludox process
· · · · · · · · · · · · · · · · · · ·	
A large an hydrus a	immonia storage tank was located at the
sulfamic acid elent.	
A	La Borne DI (RA)
AMMORIUM MY CHOKINE WE	as made in the Reagents Dept (FSA area)
	,
Sodium Thiosullate Plant	was shot down in 1958. Process operated
from 1920 to 1958	

DEC 0010926

BEV 1 62 011

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CPUBIL MEETING NOTES	PROJECT NUMBER L 21838. CO SHEET OF 16  NOTES ISSUED BY Carl Short REGION  DATE
SUBJECT: Doront Growndunder Assessi	woul - East Chicago Fucility
MEETING DATE: 12/3 - 12/5/96 LOCATION	East Chicago, ludiona
ATTENDEES: Carl Shank / 600 Archie Murrish	12/4-5
Brad Kulesza 12/3	
NOTES BIT. (DAY)	GLO
TOPICS DISCUSSED	ACTION/NOTES

TOPICS DISCUSSED ACTION/NOTES
Most lab wasks from process samples were disposed by putting the samples
back into the process. Solid wastes were put into drums and shipped
offsite. For the last 13 years, the las sink drains have been field into
the Environmental Control (EUC) system.
The Reagent drom storage contents were put back into the process. Ag Chem
works in drums were burned in the field ( new land fill area with
dike) and later, the wastes were shipped to an incinerator for
disposal.
Trush trays are dampske boxers - howled now by Calumet Wasks.
Before offsite disposal, metal trays went to metal area of landful!
and trish trajs went to trash area of the landfill. Around
1972, the area was covered by a 4' of dirt. The land fill
area is the same area as the Robble Landfill or WMU B
Scrap disposed contained paper, and board, old clothing, small cut-up
pieces et equipment and fervous metals.
Oils were collected plant-wide, and stored in buriels just south
of WMU A.

ACTION, NOTE:

None of the site landfills have formul permits with "pieces" of paper to back up the site. The state has told Dulant to continue what they are doing for the CaSO4 area.

The aud pypoline operated from ~ 1955 -> 1968 at a continuous flow of ~3 gim of H2SOq. Most of the pipoline was above ground, and for followed the road NE of the plant. Only @ fence and RP crossings did the line go below ground Most leaks were near the roadway and the fence. There were town pipelines - supply and return - for the acid. Supply was 99% H2SOq and return was 95% acid and 5%, gas and oils from Cities Service. The spent acid was collected in the Alkyl Acid Tank 5, and burned in the spent acid fornace. near contact \*3. The tank was 10,000 - 15,000 gallons, and was osed from 1955 - 1972.

The Krystal out in the Sulfamic area was notoral circulation,

The "mud buggy" transferred Zn Clz mud from the system. The much was rich in Zn and Fe, and damped onsite with the CaF and CaSOy. The buggles were used during the same period as the ZnClz operation.

The "pow poo" wegan transferred Catz slovery from the Freun unt, and then dumped in the Bentonite lineal landfill on the site. The wagon was an old converted milk truck.

There are two lagours near the north tence line. The northwest and Northeast (by the EPA well @ NE area of plant) did not have anything dumped into them, but may be contaminated by out teaks or RR the plant.

CELHILL MEETING NOTES	PROJECT NUMBER  NOTES ISSUED BY	SHEET BOF /D
SUBJECT: Dursont Groundwater Assessi	ment	
MEETING DATE: 12/3 - 12/5 LOCATION ATTENDEES:		· · · · · · · · · · · · · · · · · · ·
20 02 0 20 0 20 20 20 20 20 20 20 20 20		

ACTION NOTES Propure Buture and Isopontane were used for proprietary formulations of Freun. Storage tanks were a 20,000 gallons in a Lead area with only small quantities at the products being made. The Sulfur pt was used for storing sulfur. Until 1962 or 63, sulfur came to the site in box cars, and then showeled into one section of the pit for melting, then filtered and stured in the other section. For some time, 250 tons / day of sitter were burned. The pit had heating coils in the bottom to teep the 5 molten. Atten some time, the & writed in tank cans. Then in ~1962 to lak 60's on the early 70's, the S arrived in tank trucks. The S tank near Contact # 3 was used starting in 1955 and decommissioned 1. 1984. The capacity was 3500 tons or 100 tank cans with a tank can holding 12,000 gallons at S. The sultar pit was used from 1955 -> 1984 along with the large of trunk. The 5 pit was ~ 12' W x 40' L x 12' deep. Contact #2 used SOz (9) from the Zinc Smother or Trail One Rochers. his he Freis process, the Freus went thru a scrubber where CaFz was formed

SbUs could have been disposed in both the HCL neutralizing pit and the SbUs settling basin.

The Chrome pit is an extension of the outfall of the HCl neutralizing pit. At one time, the Cr pit outfall went directly to the vivey but now the level is low, and the area is stagnant.

MgO was used to scavenge excess  $SO_3$  in the granular sulfamic  $M_gO + 5O_3 \longrightarrow M_gSO_4$ 

The Brinks systems are scrubbers to collect Process mists. There were 2@ sulfamic, 1@ FSA, 1@ CSA and 1@ sulfamic.

A PLB storage area exists near the Freen Bldg Warbouxe. This crea was specifically located and built for PCB's. Barrels and transformers were stored here, but no grantities are known. The size of the pit is a 6'W × 12'L × 1'D. The structure is made of concrete, and was built in 1981

Two pits are located near the south west side of Ludox. The typits contain files and from the Ludox process, with water overflow of the EUC system. The files and is taken to the landful.

The Banel house dates back as fan as the Sikak business. The bldg is still in use today. Misc. chemials - formuldehyde, hexachlorophene, sugar - are stored for Ludex additives. It spills of Ludex product occured, not very toxic since Ludex is 99% Hz0 & 1% sand.

The HCl neutroling bosin is being filled with rubble at this time. Jerry is considering filling the SBCIs settling bosin

A 20,000 FSA/SO3 tank car was dumped anto the grand to the gull of the Hell town pot account 1875. A large depression to the gull EXIST TEXTER.

	PROJECT NUMBER SHEET 5 OF 16
	NOTES ISSUED BY
CELHIL MEETING NOTES	DATE
SUBJECT: DuPart Grandwater A	sessment
	· · · · · · · · · · · · · · · · · ·
	The state of the s
MEETING DATE: 12/3-12/5/EL LOCATION	
ATTENDEES:	
· · · · · · · · · · · · · · · · ·	
NOTES BY:	
	REGION
TOPICS DISCUSSED	ACTION NOTES
The constant #1	+ 4. 42 , 0 44 his up war at true
The alea near contact I ama	tanks 43 and 44 has no vegetation
after many years.	
The electrical storage yard (	(where PCBs were reportedly stored) Le the fence. Oil spills are orident
	1. H. Com Ol alling a last
371 exists we equipment inst	de the tent. Oil spills are puldent
from the dark spall areas.	
The Illiams was horse was	used at one time by Went, but is
a mail 6 Comes Delle a	when to a a - Local wassile the bloke
Mas osh of CC18CO. BUIL M	returneds were stored inside the toldy.
To the a 2 fel fel	we as site. The first is 4 ~ 10,000
TWO asses grosno for func a	7 (A ) (A. ) (A ) (A ) (A ) (A ) (A ) (A
diese funk near the old &	3. Uz area. A fuel oil tank ~10,000
and is clay for tel agent from	na Powerhouse. Jerry doesn't know
15 and 1000 1000 1000	7000
It it has over been used.	
	1
The Kubble Area - WMU B	is could 40-50 acres 95 feet deep
Glass curpous were bounded in	the site in the past, and glass
	I see the past, and glass
remans who spread over the	sute.
t	

005

Bally was used for precipitating the last 2m 54 in the 2m llz

praces

ACTION/NOTES

derry feels that the PCP's originate from the PCP the processing taulity to the north of the site.

CN may have come from the sucyanates used in Ag Chem.

Zirconium oxychloride was an additive to HU to make it reasent grade ItCl. An HCl studge tank can still is located on the site, and has zirwnium oxychloride sludge.

The Trail Ore Rossler's burned ZnS of varying amounts of metals.

Many types of ares from many countries were burned. Ore was shipped to the site by box cans—then dumped onto the ground. Storage for the are was both inside & outside. After the are was borned, the Surge went to Contact \$2, while the ZnU was transferred to a storage bin. No large quantity was supposed to be an the grand since no storage existed.

Ammate X was a blend of Ammate (Ammonium Sulfamate) and Sodium Dichromate. The sodium dichromate came to the site in boys, and was stored in the sulfamic dept.

Anything spilled in Sulfamic from 1954 - 1970 went to the precess sewer and then the river. After 1970, went thru OUZ outfull, which only had pH adjust before discharge.

Rodine was stored in the Rodine Storage Blog near Contract #3. Stored in drums and is a suspect carcinogen. Rudine DZA went into Duckan #1. Surfactant BCO also used in Duckan #1. Very small quantities (n 4 drums) were stored due to low selling volume.

To jet

Aspestes yenerated from bldy, domintements & pipe insulation.

. 1		PROJECT NUMBER	SHEET FOF 10		
	MEETING NOTES	NOTES ISSUED BY	REGION		
•	CRIHIL MEETING NOTES	DATE			
, ,	SUBJECT: DePort Groundwater Assessment				
,					
ı	MEETING DATE: 12/3 - 12/5/86 LOCATION				
	· }				
	ATTENDEES:				
			٠		
	NOTES BY:	EGION			
	TOPICS DISCUSSED		ACTION NOTES		
	Intermetion that follows from	Brad Kulesza, DoPunt			
	Velou contains hexazinore. The system is presently being dismonthed &				
	then moved to Texas. Tolvene	of the character of the hear	2 7		
	1. 1. 6 1 0 1 0	Lie Till	0 0		
	dissolved in it, and stored in jacketed rail car. T/H unloaded				
	from 5,000 gel treles 12to 23,000 gel ruel con.				
	- 1 1	· ···· · · <del></del> ····			
	In the process, the T/H mixtu	re was separated. Isluent s	bsoquently		
	separated into "Wet" Toluene (95%+) and "Dry" toluene (>95%)				
	These were stored in 10,000 gal tank cans & then shipped back				
	These were stored in 10,000 gul tank cans & then shipped back to original location in trucks. As then shipped back				
	Brad remember a 50 gal	spill of foluene @ the RZ to	nets		
	Brad remember a 50 gal pt is sure of others happe	alag.			
	The second secon	)	-		
	Valuele Stance Tack - 8'00 x	17'4 . Test 30 . 4			
-	Viluste Storage Tank - 8'0 x glass li	- f - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	gas		
	9(2)	Carbon steel			
	Contained toluene wast from distillation; w/ hexazina				
			!		
Hexine Storage Tanks - filled by trucks. Lunge trunk received shipments, while					
	smull trunk used for fransters				
	Lane - Tank 32 12'd + 13'H		;		
	Smill - Tunk 31 84 4 8.51 /	Witnesd 31+557 2,200	S.		
		,			

DEC 0010927 007

, C. V

ACTION/NOTES

No liquid wastes from Ag Chem have been street in draws for the last 4-5 years.

Wash water wastes street in railcons near the Toluene Cans

In the part, spills from the cleaning of the process went onto the grown near the PR cans. Mostly H2O, some hexazinane, a little toluene, but no hexame.

For list 2-21/2 years, wish water collected in rul can & shipped to Chambers Work. I can every 1-1/2 years @ 20,000 gal/can

Dry Moxuzinane floor sweeping wests stored in drums @ Ag Chem Whether since at least 1970. Hexazinane - non regulated waste, and get to CID in Chicago

Hexazinane stored onsite in wavehouse in 200 15/35 gel Fiberdrums. ~ 100,000 - 200,000 15 stored annually near Ag Chem

Az Chom Other tendes outside m1 x 35T 3600 gal SIX X 8H Hexune /Toluene 75/25 Dut Feed Tunk T-21 12" 0 x 40 L T-6 Vent (underser Dried Hexune Tunk comban steel for heat transfer T-17 G1710/ carbon steel 5'\$ \* 5'H Dut. (chan Rebuila Condense

Wate Storage tank contents incinerated @ Beke Plant. ~ 4,000 gal/month during operation. Considered a Haz. Wask. From New 84 to present, operated continuously. From 1974-1944 - operated 6 months / year. Since 1983 - works incinerated. Prov to \$3 that, from 1974-1983 went to 1974-1983.

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	PROJECT NUMBER SHEET 9. OF 16
	NOTES ISSUED BY REGION
CEMHIL MEETING NOTES	DATE
SUBJECT: DuPont Grandwater As	scass no. t
SUBJECT: DUTIAN COMPLETE 13	7)26)3 /462.
MEETING	
DATE: LOCATION	
ATTENDEES:	
NOTES BY:	
	REGION
TOPICS DISCUSSED	ACTION/NOTES
Bred does not remember and so	Ils from the Weste Storage Tank (*30)
At one they there was not a	spill collection system for the RR
Al da time, 100 was as a	Spill Witches System S
cars. Now a storag car is a	sed for collection. Some liquid has
probably escaped during loading	Junlouding of the pipes.
Existing FSA stevago tembre	- <del></del>
FSA Storige 20, 400 gul	
AHF Duy Showse 8775 gal	7'4 * 30'L C.Steel
Small Sulture 75 gal	
503 Strage 10,000 gul	9 \( \psi \) \( \begin{align*} \begi
SO2 - truck truck sugala	3 touts/week @ 3,000 gul es. 1 cm/6-7 væks Zu,000 gul
- 3	J. 140005/West & J. 000 Ja Es.
AHT - real can supply	/ can/6-7 vacks 24,000 gul
,	
N. + 10 Es	1
No wester generated in FSA	T process, No Intellige Tanks
The trade the Stude case	pecific gravity or viscosity.
I had said the Similar the	DATALA TADSTITY (GATION) STREET ST JOCIOM
silicate solution. that very by si	pertic gravity or viscosity.
	<i>y</i>
The Banel House is used in	
The Dane House 11 used	To locating of Lodon & Silvate
Tunk Can's Trucks for	Silicake
De 1 1 3, 5 /	/ /

TOPICS DISCUSSED

ACTION:NOTE

3 A rail cas week for silicate & greater than 10 to trucks!

week for silicate loading.

Soda Azh stored in tank ans on the RR spor - ~ 2/week

Soda Ash Hoppen ~ 10,000 /s 11-5 20'\$ \* 204" H 195 gul/in (4whc 16'\$ \* 264" H 110 gul/in 5-12 82"\$ \* 25' L 941 f43 of 67% Sucrose Sand 25'\$ \* 409" H 50 H3/Inch

Sund is tricked into the site.

The area around the outside seems tanks goes to the sowers, and then to EVC

Buderiandes and glycol still stored in the Bonel House

·	PROJECT NUMBER SHEET / OF /6
	NOTES ISSUED BY
MEETING NOTES	DATE
D016011	
SUBJECT: Durint Erwandwater Assess	5 ment
MEETING	
DATE: 12/3 - 12/5/2 LOCATION	
ATTENDEES:	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
NOTES BY:	REGION
TOPICS DISCUSSED	ACTION/NOTES
Following intermedian received for	m Grey Behm Dukat
Ludur tilke pross pits (SW cw	mer of site) weather into weste storage
trunks then to EVC & 003 outf	all. Solds from filter press taken
	elled Lodox - polymence silicic acid,
Salka Floc, Celike File And . Res	in Fines Hollow Superioll, and Silice Scale.
·	
·	rowly while the offen trad bed
process culy run ~ 4 weeks /y.	ear.
4/	· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·
Solids produced - & filler butches	1 / day @ 85% whit
100 /1 00	4 & 11 11 11 11 11 11
13 /10-104	\$ 11 15 filter and / batch
1000 16 4 0. <b>3</b> 5 x 3	65 2 155 has /year
	,
24 //s. £ 1/0// / 0	1 211 11011 . 6 5.
DUIN H2 XVy ! No Ut stored oes H	k near Ludox Blog. NoOH used he
2/4 adjust & equipment chaning.	
1 J	
Stored in Adhesives Whichair.	Lithium Hichorade, Flake (Gostic, Amazonian)
Bu h la < 1. 11 1.	ALL 114 D. 611 1 (1 1
1) (assurate ) odlar flominate	- Nalio 4690, Rosin, Ethylane Glycal
The Hall Tack Could be	
The Hand Tack Coystabrer was a	you to a short that
Two bones late water finits is	ice lular AH F C. H. a. h
$\mathcal{L}_{\mathcal{L}}}}}}}}}}$	011
E wo gullion	UII

DEC 0010927

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	TOPICS DISCUSSED	ACTION/NOTES
	Horizontal Hot Water 8'0 x 20'2 Sted	
	Vertical Hot Water 7' \$ x 10'H Steel 290050	
	Strong Acrd 66 Be 10' \$ \$ 8.5' 4 Step1	· ·
	Strong Wesk Aud (3) 1-27. H2SLY	
	Stung Wesk And (3) 1-27. H2SXX Weak Wate And 0.17. H2SXX	
	West East Surgo Teaks 34000 50 50'\$ * 20' H C.5	
	Clarifier 45,000 50 30'4 x 10'4	
	Flocculatur 7800 gal 42'L x 6'W x 5'H CS	
	Strong Wask Ard 33,000 get 12'0 x 40' Altec	
	Weak Waste Azid 19,500 gel 14.5'\$ x 16' Bonte Pdyo	
	Lime Sturge 4000 of 12' \$ * 50'4 stel	
	Slurry Tank 700 gal deel	
	002 offall area	
	Primary 2500 gal & # 13'7" # Fiber April	tweed
	Secondary 450 gel 10'0 + 13'7" H Fiber Re	intered
į	Carshe 50% 24,400 gel 10'\$ x 40'L C5.	
	Azıd 66°Be 3230 gal 7'4 x 10'6 Stee	
	Blanceses are used to store various chemicals thru-out t	Le
	site. Specifically Ammonium hydroxide for Ludox	
	A	
	A new Power House west co-line in 1986. 3 hollers an	natiges
-	66° H <sub>2</sub> SO <sub>4</sub> 7'6' Ø * 13' L 43 W g L Lake Water 12' Ø * 15' H 12,550 g D steel	
	Lake Water 12:0 + 15: H 12,550 gml steel	
	Kazonerute Wast /ank 12 4 * 10.5 His sofkning regener. System TRT	Ear La
	Soft Water capt 10.5 22'0 + 20'H Coal Par	yory Lines
:		
	But a Blumdown @ 2-3 gpm - condictivity Zewo-2500 micromthos	
	The second secon	
	DFC 0010027 paikulinity 400 ppm (2003	U 012
	DEC 0010927	<b>□ 1</b> ~

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	DDG IFGT NUMBER	SHEET 13 OF 16.
		3HEET () OF [0
CENHIL MEETING NOTES	NOTES ISSUED BY	REGION
	DATE	
SUBJECT: Defant Crowndwater	ASSESSMENT	
3083201		
MEETING DATE: 12/3- 12/5/86 LOCATION_		
DATE: _ [9] 192109 200ATION _		
ATTENDEES:		
NOTES BY:		
	REGION	<u></u>
TOPICS DISCUSSED		ACTION/NOTES
The File of the second	1 1 1 N - 1 7 Q +	
The Following information 5-2p/las	( Sy Marie 1907/114 ) Witoni	
	•	ļ
A Clare do 1 los +	4. 1 · 11 · 11 · 11 · 11	6/4
A Sultar pile was located in +		
was removed. Sulfor disposed	in the NE section of the	bland
		F
in the Rubble Area and near	the dd burner sing.	
T. k. 3432 & 3. 0 C	// C . /	
Tanks 34,35 \$ 36 used for	the Dy Storage	
Cooler by the Cote to call	(1.110)	//
Cure busins in the Contact and	CHEMOLO processes had 120 tu	119
over the contact coolers. Leaks oc	cured that continued the	
busin & eventually the river.		
Basia . PCENTULITY THE MOCA.		
Contact #2 had a Cothell h	set Preside La La manuale dist	
particles before entering Contact	2 from the hard One Roasker	r.
The slury was procepitated, and	I then sent since there Those	
The stay was precipitate, cons	// See sure whee. I do	· · · · · · · · · · · · · · · · · · ·
also a slury bank for the pre	ocypitator, with the slurry dul	hazed
somewhere east of the plant.		,
parties of the parties		
There are unions borned pipelines she easier and norther parties of	who as Delit drawner	4
Difference Signature	or mount or or of or	·~-
Easier and norther pertian of	the site. Contain No cil	′.
and cas.	2, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 1, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,	/
7		1

ACTION, NOTES

The radroads were result often, with the dist sent to the landfill. Don't know what happened happened to the ties.

Returning to into by Lerry Mayor, Dufant.

The ZnUz / wis a coule evaporator for ZnUz concentration

The sulfamic process has 2 pits located non the sulfamic process. Each 10,000 gal. Overthow from the pits went to 002. The pits were used originally for dumping of crude premix. Now they are used for newtralization of wask across from FSA. Also have been used for and newtralization during tank cleanings. The non sludge from the tank cleanings went into the pit, with sludge them to landfill (which is not really permitted) or to 002.

Dimethyl Phtholate was used four stabilization of Suz. Hwas put directly into the starage tank.

Ethylene gly(o) was used for heat transter, and stired new contact #3 on the river side.

Sulfar weste had been put into a hole just such of contact 3 along the river when a landfull became full.

CC/q was stored in 2 tanks - supplied by tank can. Volume ~ 100,000 gad One tank was cleaned in 1973 or 1974, with a real studge being removed. The studge might have give to the landful.

A large old pit was found near the new purchase during form. execute excavation. Pit built with RR too, but no one knows the use

Selfamic Dept had a large anithdress NH tank for the NHg OF

DEC 0010927

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	PROJECT NUMBER SHEET 15 of 16_
MESTING NOTES	NOTES ISSUED BYREGION
CENTILL MEETING NOTES	DATE
SUBJECT: DoPort Groundwider Assessmen	لي
SUBJECT: DOIDE OVE STATE / PETER	
WEETING	
MEETING DATE: 12/3 - 12/5/56 LOCATION_	
ATTENDEES:	·
ATTENDEES.	
NOTES BY:	
	REGION
TOPICS DISCUSSED	ACTION/NOTES
Another of encled for neutralize	ation of HCL E. HF. The pit contained
Imestave.	
//messure.	
Sultanic Dits could down have be	een located near the From truck garage. Had ammate liquor. Used anomal 1960.
P./-	
1 17 Made of concrete and 1	had ammed liquer. Used around 1960.
A refule structure was lorate	I near Roads "5' E between E & f'
just north of Storage Tent A	
Just north of storage reac	NT-5.
Part Storage was located to the	e NW of the lysecticide Blds.
Salt Cate Strings was used to	for product from the NOU+ Hy Sty reaction.
Bldg had root & 4 wells.	For product from the NeCl + H. Sty reacher.
1	
A small Nall pile was located	2 outside the Manheim Firmure Blig.
•	·
() Iside Bulk Storage	
, 0	
Sultur Piles - I pik near e	each Chambers Poves, Contact #1 Contact #3
Zinc (rude - 3 ansa;	nea Br C/2 process
Sult	
Coal	

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## CBI Documents Associated with DuPont 1/28/93 Response to CERCLA 104(e)/RCRA 3007

DEC0010973 001 - (18pasa to \$ € (1

DEC0010974 001 - sugrass + #51

DEC0010978 001 THROUGH 008 -- 8 page letter from J.T. Sixsmith, DuPont, dated //79, to Joseph Stallsmith, IDEM, regarding pesticide formulation at the DuPont facility.

DEC0010979 020 - represe + \$53

DEC0010981 001 \_ ~

DEC0010983 001 - 4



January 6, 1993

#### **OVERNIGHT DELIVERY**

Roger Field, Esq.
Office of Regional Counsel
U.S. EPA Region V
111 W. Jackson St.
Chicago, Ill 60604-3590

Re:

Supplemental §104 (e) CERCLA Information Request

Du Pont East Chicago, IN Plant

Dear Mr. Field:

As a follow-up to the conference call between representatives of E. I. du Pont de Nemours and Company ("Du Pont") and US EPA Region V on October 23, 1992 regarding the above-referenced Information Request, I am writing to provide you with a status report on our efforts to provide the Agency with Du Pont's responses by the agreed-upon revised deadline of Friday, January 29, 1993.

I also want to take this opportunity to introduce myself as the new legal contact for Du Pont with respect to this matter. My full name, mailing address, phone and fax numbers are noted below. Assignments in our Environmental Law Group were recently changed and I am now the in-house attorney responsible for Du Pont plant matters in the State of Indiana. Mr. Griffiths has been assigned to matters in other states, but he has briefed me on his efforts to conduct a search of Du Pont records in response to the Request.

Mr. Griffiths and two paralegals spent two days at the East Chicago Plant (November 9-10, 1992) going through plant files. Responsive documents were marked, copied and shipped back to Wilmington to be organized in accordance with the instructions contained in the Request. As of this writing, 90% of the documents have been so-organized and responses to the questions are being formulated. It appears that Du Pont will be submitting approximately 4 - 5 boxes of documents (approximately 2000 pages per box).

Du Pont expects to be able to adhere to the revised submission schedule and submit its response by January 29, 1993.

I look forward to working with you on this matter and ask that if you have any questions prior to January 29, 1993, you contact me.

Very truly yours,

Steven A. Coppola

Full Address:
Steven A. Coppola, Esq.
Du Pont Legal, D-7152
1007 Market Street

Wilmington, DE 19898 ph. (302) 773-0149

fax #(302) 774-1189

cc:

E. F. Hartstein, Plant Manager, East Chicago Plant

O. J. Meyer, East Chicago Plant

D. E. Epps, DERS, BPCC 390

Thomas Marks, Chief, EPA Region V Responsible Parties Section

Joseph A. Malek, U.S. EPA Region V

Robert Tolpa, U.S. EPA Region V

Robyn Magee, Du Pont Legal = 30 173 6415



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

HSM J5

October 1, 1992

Mr. E. F. Hartstein Plant Manager E.I. DuPont 5215 Kennedy Avenue East Chicago, IN 46312

Re: Request for Supplemental Information Pursuant to Section 104 of CERCLA and Section 3007 of RCRA, for the E. I. DuPont Site in East Chicago, Indiana hereinafter referred to as "the Site"

Dear Mr. Hartstein:

This Agency appreciates the information and data furnished in response to an Information Request previously sent to E. I. Dupont's facility at East Chicago, Indiana. Because there is a need for this Agency to have additional information and data about that facility, a Supplemental Sec. 104 (e) Information Request is enclosed which requires a response within thirty days from the date of your receipt of this letter.

I again would like to inform you that you may assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 CFR 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent, and only by means of the procedures, provided in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by U.S. EPA, it may be made available to the public by U.S. EPA without further notice.

Failure to comply with Supplemental Information Request or failure in responding fully, truthfully and in a timely fashion to all items requested may subject you to an enforcement action seeking to compel compliance and collect penalties of up to \$25,000 per day of noncompliance pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. Section 9604(e)(5). U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1980.

Your response to this Information Request should be mailed to:

Joseph A. Malek
Superfund Program Management Branch (HSM-5J)
United States Environmental Protection Agency
77 West Jackson Street
Chicago, IL 60604

This Supplemental Information Request contains some definitions to terms or expressions used within the Supplemental Information Request. Only where such definitions differ from those contained within the initial Information Request are the new definitions applicable.

In the event you have any questions or need assistance, please contact Mr. Malek at 312-353-2007 who will endeavor to be of help or who will direct your inquiry to the appropriate staff person for response.

Sincerely yours,

Thomas Marks, Chief Responsible Party Search Section

Enclosure

CONCURRENCE REQUESTED									
TECHNICAL SUP	PORT SEC	TION, SP	vis. Osf						
TRAIS									
AUTHOR TYPIST	PUE-REM	TISM, WIFE	1	OBG	SKL LH	ووج كالمؤثير	0.9	WW.D	14.54

DISK UNFORMATION:

#### SUPPLEMENTAL INFORMATION REQUEST

#### **DEFINITIONS**

- A. "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- B. "Disposal" means the discharge, deposition, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- C. "Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them), as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- D. "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in 329 IAC 3-3 through 3-6 and 40 CFR 261.10 through 261.33 or whose act first causes a hazardous waste to become subject to regulation, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- E. "Hazardous waste" means a hazardous waste as defined in 329 IAC 3-6-1 and 3-1-7 and 40 CFR 261.3 and 260.10.
- F. "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an

- underground mine, or a cave, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- G. "Person" means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- H. "Pile" means any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment and storage, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- "Solid Waste" means any garbage, refuse, sludge from a I. waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from the industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923), as defined in Section 1004 of the Solid Waste Disposal Act, as amended.
- J. "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- K. "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed

primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid waste or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.

- L. "Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- M. "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character, or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- N. "You" or "Respondent" shall mean the addressee of this Request, the addressee's officers, managers, employees, contractors, trustees, partners, successors, assignees, and agents.
- O. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in RCRA, 40 CFR Part 300 or 40 CFR Parts 260-280, in which case the statutory or regulatory definitions shall apply.

#### SUPPLEMENTAL INFORMATION REQUEST

- Identify and provide a copy of all documents which 1. relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, ditches, outfalls, including but not limited to Waste Management Unit #13 as referenced in Phase I Report, buildings, tanks, or containers and to the subsequent disposition of all residues, contaminated soil, water, or other debris resulting from the cleanup from the demolition and removal of facility structures, process sewers, ditches, outfalls, including but not limited to Waste Management Unit #13, buildings, tanks, or containers from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).
- 2. Identify and provide a detailed description of any and all of the locations from which the hazardous and nonhazardous solid waste from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated, stored, treated, or disposed from 1980 to the present.
- 3. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, and containers which were generated, stored, treated, or disposed from 1980 to the present.
- 4. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous

solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated and removed at or from the facility from 1980 to the present.

- 5. Identify and provide a detailed description of the activities undertaken in the generation of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers, including the date upon which each activity occurred from 1980 to the present.
- 6. Identify and provide a detailed description of the methods and devices used to store or treat any residue or contaminated soil, water, or other debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates upon which such storage occurred from 1980 to the present. Specify whether said residues, soil, debris etc., were stored in containers, tanks, surface impoundment, landfills, or piles.
- 7. Describe any treatment conducted on any residue, contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- 8. Identify and provide copies of all tests, analyses, analytical results, manifests, or any other document containing data related to any residue or contaminated soil, water, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- 9. Provide date(s) of shipment and identify the name and address of any person or place to whom any residue or contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from

1980 to the present.

- 10. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Unit #4, as referenced in Phase I Report, from 1980 to the present. Such documents include, but are not limited to, manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).
- 11. Identify and provide a detailed description of the Waste Management Unit #4 from which the hazardous and nonhazardous solid waste was generated, stored, treated, or disposed from 1980 to the present.
- 12. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes generated, stored, treated, or disposed from 1980 to the present from Waste Management Unit #4.
- 13. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous solid wastes were managed in Waste Management Unit #4 and removed at or from the facility from 1980 to the present.
- 14. Describe any treatment conducted on any hazardous or nonhazardous solid waste in the Waste Management Unit #4 from 1980 to the present.
- 15. Provide date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped from 1980 to the present from the Waste Management Unit #4.
- 16. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes being generated, treated, stored, or disposed from or

at the facility, including but not limited to, waste presently being placed in Waste Management Unit #5, from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3). 17. Provide the following certification before executing the response

"I certify under the penalty of law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- 18. Furnish the name and last known address of the suppliers of organic and inorganic chemicals or solvents for the period of time that you have occupied the premises to and including 1990, and in the event that such chemicals were supplied by an affiliate or division of E.I. DuPont, then in that event identify the name and location of that facility specifying in each instance the trade name or chemical composition of any such chemical or solvent.
- 19. Furnish any and all aerial photographs of your facility or any portion thereof and identify the year that the photo tends to depict the area photographed.
- 20. Furnish copies of any and all local, state and federal permits granted or issued with reference to the operations of any portion of the facility or the use, construction, transportation, removal, storage of any chemical, substance or solvent or facility built, erected or placed upon the property to contain, house, confine or process any such

chemical, substances or solvents.

- 21. With reference to Table 3-1 of CH2M HILL's Phase I Groundwater Assessment Report, does E.I. DuPont, its contractors or attorneys possess any record, document, report, or any other writing
  - A. More descriptive of any waste unit's contents other than those disclosed within the column of the table labeled "Possible Contents"
  - B. Descriptive of any quantity received by any waste unit other than those disclosed within the right column of the table?
- 22. If either or both of the preceding subparagraphs are answered in the affirmative, furnish all such records, documents, reports or writings.
- 23. Do you possess any information or knowledge that the site may have had other Waste Management Units other than those which are identified within Table 3-1?
- 24. If the preceding question is answered in the affirmative, state the facts or basis of such information or knowledge.
- 25. Were any of the wastes or products from any of the thirty-six Waste Management Units or from those units identified in your response to Paragraph 23 disposed or discarded either by dumping such waste into, in, upon or adjacent to the Grand Calumet River?
- 26. If yes, describe such waste or waste products, its quantity, the year such disposal commenced and the year it may have ended. In addition, furnish process flow charts description of or explaining the resulting waste or waste product.
- 27. Do you possess or does someone else possess the results of any analytical chemical tests of the soil, water or air above, under, at or near any of the waste management units identified in either Paragraph 21 or 23, above?

- 28. If the preceding question is answered in the affirmative, please
  - A. Furnish the name and address of each contractor or third party that may have conducted any such test, or participated in the analysis and the date of such test. If neither a contractor or third person participated in such testing or analysis furnish such contractor's or third persons name and address. If any test or analysis was undertake by or participated in by a former employee, furnish the name and last known address of any such employee or employees, and
  - B. Furnish copies of all such tests and analysis.
- 29. Please furnish copies of each of following documents referenced in CH2M HILL's report within Appendix A:

Document No.	Document Description
C-P-8C	Letter from EPA to U.S. Atty re waste
	constituents for DuPont's discharges
	into the Grand Calumet River
C-P-8L	Plant environmental history
E-P-21A	Plant lifetime production record
E-P-25A	Process and storm sewers map
E-P-25B	Waste process waste outfall
E-P-25E	Plant outfalls into the Grand Calumet
	River
E-P-501L	Inventory of electrical wastes from
	transformers
E-W-552Z	Plant discharges to river
E-W-554F	Waste disposal on land

- 30. At any time did DuPont dredge amy material from the Grand Calumet River or its banks at or adjacent to the site?
  31. If the preceding question is answered in the affirmative, please
  - A. Explain the reason, purpose or circumstance for any dredging operation,

- B. Describe when any dredging took place, the portion of the river then involved, and where dredged material were disposed or stored,
- C. Describe what was done to or with the dredged material, and
- D. Furnish copies of all analytical or chemical tests or reports conducted on such dredged material.
- 32. Furnish a copy of the lease between DuPont and Purdue University entered into during 1974, copies of all correspondence between the parties or their agents concerning that lease or correspondence concerning the University's findings. This lease is mentioned at paragraph 3 of your Response to a Section 104e Information Request dated November 22, 1991.
- 33. On page 3-2 of CH2M HILL's Phase I report the statement is made that "Handling methods for the (production) wastes have changed dramatically in the 96 years of operation. Originally, plant wastes were discharged directly into the Grand Calumet River, onsite pits, ponds, basins or landfill areas without pretreatment." Identify by name, date, author and descriptive title all reports, documents, writing, maps, plats, photos, drawings, records which are in your possession which describe, explain, graphically represent or depict such original discharges and also those which were consulted or examined in preparation of the CH2M HILL report.
- 34. Before NPDES permits were obtained for the site, describe the chemical contents of all discharged or discarded mud waters or processing waste waters and the means and methods for their disposal. If onsite or into the Grand Calumet River identify the place of such disposal and amount thereof. If offsite, furnish the name and address of the transporter, the amount of water, and place to which such discharged or discarded waters were transported.
- 35. The CH2M HILL Phase I report states, at a number of

locations therein, that some information, data and information necessary to prepare the report was obtained by interviewing current or former employees. Furnish the names of all persons so interviewed, describe his or her current or former position with DuPont, supply the last known address of all former employees or third persons so interviewed and attach copies of all such interviews or reports of such interviews.

- 36. Page 3-4 of the CH2M HILL's report in describing WMU 4 states, "This WMU 4 consists of the onsite interim storage areas for hazardous wastes. The AgChem drum area contains wastes that were generated in the operation of the AgChem processes." With reference to the statements quoted, please:
  - A. Explain the actual period of time that an AgChem products was stored at such onsite location for each product mix formulated by, delivered to or processed by AgChem,
  - B. Describe the type of container used for such product while in the storage area,
  - C. Furnish all photographs in your possession which may depict the storage of such products,
  - D. Furnish the beginning and ending date of the AgChem operation, and
  - E. Furnish process flow charts of each and every chemical or formulation produced, prepared or engineered by the AgChem operation.
- 37. Did E.I. DuPont place any chemical, waste, product, personal property or soil into, upon or at the wetland on its property?
- 38. If the preceding question is answered in the affirmative, please:
  - A. Describe the chemical, waste, product or personal property that was so placed and
  - B. Indicate the starting and ending date of such

placement.

- 39. List all the pesticides ever formulated, manufactured, prepared, mixed or processed at the facility furnishing the beginning and ending date of such manufacture, preparation, mixture or processing and the amount of each such pesticide.
- 40. Has any employee, third party, or government agency ever communicate to E. I. DuPont that someone's death, bodily disease, or adverse health had been or could have been caused wholly or partially by any of the pesticides listed in response to Paragraph 18?
- 41. If "Yes" is supplied in response to the preceding question, then furnish a copy of all such communications if in writing and furnish a verbatim copy of all such oral communications.
- 42. CH2M HILL's Phase I report, at Figure 1-2, describes WMU 5, 14, 20 and 29 as still active operations. Describe the waste management practices at each of these units and furnish copies of state, local government and federal permits issued with reference to all these units.
- 43. When did the Freon Plant cease operations?
- 44. Do you have any information, reports, data or documents describing the amount of PCBs at any portion of the site or in the adjoining river but adjacent to the site? If so, furnish copies of all such reports, data, and documents.
- 45. What year and month did the site first begin discharging its wastewater into the East Chicago Sanitary District treatment plant and at what location at the site did such discharge first take place?
- 47. What process waters discharged into the East Chicago Sanitary District, if any, and over what period of time did such discharge take place?
- 48. Identify, per seep, its daily maximum flow for all current and former groundwater seeps at the site.
- 49. Has the company ever manufactured or produced chemicals, compounds or use processes which contained

mercury, nickel or cadmium.

- 50. Has the company ever manufactured or produced organic pesticides and/or herbicides.
- 51. If you answered "Yes" to the questions posed in paragraph 49 and/or 50, for one or both paragraphs furnish
  - A. Their chemical and compound name, including its trade name,
  - B. Their chemical composition,
  - C. The location at the premises where they had been manufactured or processed.
- 51. Have any of the chemicals, compounds, pesticides or herbicides been disposed of or discharged at the site?
  52. If "Yes" is the answer to the preceding question explain the circumstances, the date, and describe the chemical, compound, pesticide or herbicide and the quantify so disposed or discarded.



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HSM J5

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 1, 1992

Mr. E. F. Hartstein Plant Manager E.I. DuPont 5215 Kennedy Avenue East Chicago, IN 46312

Re: Request for Supplemental Information Pursuant to Section 104 of CERCLA and Section 3007 of RCRA, for the E. I. DuPont Site in East Chicago, Indiana hereinafter referred to as "the Site"

Dear Mr. Hartstein:

This Agency appreciates the information and data furnished in response to an Information Request previously sent to E. I. Dupont's facility at East Chicago, Indiana. Because there is a need for this Agency to have additional information and data about that facility, a Supplemental Sec. 104 (e) Information Request is enclosed which requires a response within thirty days from the date of your receipt of this letter.

I again would like to inform you that you may assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 CFR 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent, and only by means of the procedures, provided in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by U.S. EPA, it may be made available to the public by U.S. EPA without further notice.

Failure to comply with Supplemental Information Request or failure in responding fully, truthfully and in a timely fashion to all items requested may subject you to an enforcement action seeking to compel compliance and collect penalties of up to \$25,000 per day of noncompliance pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. Section 9604(e)(5). U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1980.

Your response to this Information Request should be mailed to:

Joseph A. Malek
Superfund Program Management Branch (HSM-5J)
United States Environmental Protection Agency
77 West Jackson Street
Chicago, IL 60604

This Supplemental Information Request contains some definitions to terms or expressions used within the Supplemental Information Request. Only where such definitions differ from those contained within the initial Information Request are the new definitions applicable.

In the event you have any questions or need assistance, please contact Mr. Malek at 312-353-2007 who will endeavor to be of help or who will direct your inquiry to the appropriate staff person for response.

Sincerely yours,

Tom Marks, Chief Responsible Party Search Section

Enclosure

#### SUPPLEMENTAL INFORMATION REQUEST

#### **DEFINITIONS**

- A. "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- B. "Disposal" means the discharge, deposition, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- C. "Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them), as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- D. "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in 329 IAC 3-3 through 3-6 and 40 CFR 261.10 through 261.33 or whose act first causes a hazardous waste to become subject to regulation, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- E. "Hazardous waste" means a hazardous waste as defined in 329 IAC 3-6-1 and 3-1-7 and 40 CFR 261.3 and 260.10.
- F. "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an

- underground mine, or a cave, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- G. "Person" means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- H. "Pile" means any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment and storage, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- I. "Solid Waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from the industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923), as defined in Section 1004 of the Solid Waste Disposal Act, as amended.
- J. "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- K. "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed

primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid waste or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.

- L. "Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- M. "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character, or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- N. "You" or "Respondent" shall mean the addressee of this Request, the addressee's officers, managers, employees, contractors, trustees, partners, successors, assignees, and agents.
- O. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in RCRA, 40 CFR Part 300 or 40 CFR Parts 260-280, in which case the statutory or regulatory definitions shall apply.

#### SUPPLEMENTAL INFORMATION REQUEST

- Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, ditches, outfalls, including but not limited to Waste Management Unit #13 as referenced in Phase I Report, buildings, tanks, or containers and to the subsequent disposition of all residues, contaminated soil, water, or other debris resulting from the cleanup from the demolition and removal of facility structures, process sewers, ditches, outfalls, including but not limited to Waste Management Unit #13, buildings, tanks, or containers from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).
- 2. Identify and provide a detailed description of any and all of the locations from which the hazardous and nonhazardous solid waste from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated, stored, treated, or disposed from 1980 to the present.
- 3. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, and containers which were generated, stored, treated, or disposed from 1980 to the present.
- 4. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous

- solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated and removed at or from the facility from 1980 to the present.
- 5. Identify and provide a detailed description of the activities undertaken in the generation of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers, including the date upon which each activity occurred from 1980 to the present.
- 6. Identify and provide a detailed description of the methods and devices used to store or treat any residue or contaminated soil, water, or other debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates upon which such storage occurred from 1980 to the present. Specify whether said residues, soil, debris etc., were stored in containers, tanks, surface impoundment, landfills, or piles.
- 7. Describe any treatment conducted on any residue, contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- 8. Identify and provide copies of all tests, analyses, analytical results, manifests, or any other document containing data related to any residue or contaminated soil, water, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- 9. Provide date(s) of shipment and identify the name and address of any person or place to whom any residue or contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from

1980 to the present.

- 10. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Unit #4, as referenced in Phase I Report, from 1980 to the present. Such documents include, but are not limited to, manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).
- 11. Identify and provide a detailed description of the Waste Management Unit #4 from which the hazardous and nonhazardous solid waste was generated, stored, treated, or disposed from 1980 to the present.
- 12. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes generated, stored, treated, or disposed from 1980 to the present from Waste Management Unit #4.
- 13. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous solid wastes were managed in Waste Management Unit #4 and removed at or from the facility from 1980 to the present.
- 14. Describe any treatment conducted on any hazardous or nonhazardous solid waste in the Waste Management Unit #4 from 1980 to the present.
- 15. Provide date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped from 1980 to the present from the Waste Management Unit #4.
- 16. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes being generated, treated, stored, or disposed from or

at the facility, including but not limited to, waste presently being placed in Waste Management Unit #5, from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3). 17. Provide the following certification before executing the response

"I certify under the penalty of law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- 18. Furnish the name and last known address of the suppliers of organic and inorganic chemicals or solvents for the period of time that you have occupied the premises to and including 1990, and in the event that such chemicals were supplied by an affiliate or division of E.I. DuPont, then in that event identify the name and location of that facility specifying in each instance the trade name or chemical composition of any such chemical or solvent.
- 19. Furnish any and all aerial photographs of your facility or any portion thereof and identify the year that the photo tends to depict the area photographed.
- 20. Furnish copies of any and all local, state and federal permits granted or issued with reference to the operations of any portion of the facility or the use, construction, transportation, removal, storage of any chemical, substance or solvent or facility built, erected or placed upon the property to contain, house, confine or process any such

chemical, substances or solvents.

- 21. With reference to Table 3-1 of CH2M HILL's Phase I Groundwater Assessment Report, does E.I. DuPont, its contractors or attorneys possess any record, document, report, or any other writing
  - A. More descriptive of any waste unit's contents other than those disclosed within the column of the table labeled "Possible Contents"
  - B. Descriptive of any quantity received by any waste unit other than those disclosed within the right column of the table?
- 22. If either or both of the preceding subparagraphs are answered in the affirmative, furnish all such records, documents, reports or writings.
- 23. Do you possess any information or knowledge that the site may have had other Waste Management Units other than those which are identified within Table 3-1?
- 24. If the preceding question is answered in the affirmative, state the facts or basis of such information or knowledge.
- 25. Were any of the wastes or products from any of the thirty-six Waste Management Units or from those units identified in your response to Paragraph 23 disposed or discarded either by dumping such waste into, in, upon or adjacent to the Grand Calumet River?
- 26. If yes, describe such waste or waste products, its quantity, the year such disposal commenced and the year it may have ended. In addition, furnish process flow charts description of or explaining the resulting waste or waste product.
- 27. Do you possess or does someone else possess the results of any analytical chemical tests of the soil, water or air above, under, at or near any of the waste management units identified in either Paragraph 21 or 23, above?

- 28. If the preceding question is answered in the affirmative, please
  - A. Furnish the name and address of each contractor or third party that may have conducted any such test, or participated in the analysis and the date of such test. If neither a contractor or third person participated in such testing or analysis furnish such contractor's or third persons name and address. If any test or analysis was undertake by or participated in by a former employee, furnish the name and last known address of any such employee or employees, and
- B. Furnish copies of all such tests and analysis.

  29. Please furnish copies of each of following documents referenced in CH2M HILL's report within Appendix A:

Document No.	Document Description
C-P-8C	Letter from EPA to U.S. Atty re waste
	constituents for DuPont's discharges
	into the Grand Calumet River
C-P-8L	Plant environmental history
E-P-21A	Plant lifetime production record
E-P-25A	Process and storm sewers map
E-P-25B	Waste process waste outfall
E-P-25E	Plant outfalls into the Grand Calumet
	River
E-P-501L	Inventory of electrical wastes from
	transformers
E-W-552Z	Plant discharges to river
E-W-554F	Waste disposal on land

- 30. At any time did DuPont dredge amy material from the Grand Calumet River or its banks at or adjacent to the site?
  31. If the preceding question is answered in the affirmative, please
  - A. Explain the reason, purpose or circumstance for any dredging operation,

- B. Describe when any dredging took place, the portion of the river then involved, and where dredged material were disposed or stored,
- C. Describe what was done to or with the dredged material, and
- D. Furnish copies of all analytical or chemical tests or reports conducted on such dredged material.
- 32. Furnish a copy of the lease between DuPont and Purdue University entered into during 1974, copies of all correspondence between the parties or their agents concerning that lease or correspondence concerning the University's findings. This lease is mentioned at paragraph 3 of your Response to a Section 104e Information Request dated November 22, 1991.
- 33. On page 3-2 of CH2M HILL's Phase I report the statement is made that "Handling methods for the (production) wastes have changed dramatically in the 96 years of operation. Originally, plant wastes were discharged directly into the Grand Calumet River, onsite pits, ponds, basins or landfill areas without pretreatment." Identify by name, date, author and descriptive title all reports, documents, writing, maps, plats, photos, drawings, records which are in your possession which describe, explain, graphically represent or depict such original discharges and also those which were consulted or examined in preparation of the CH2M HILL report.
- 34. Before NPDES permits were obtained for the site, describe the chemical contents of all discharged or discarded mud waters or processing waste waters and the means and methods for their disposal. If onsite or into the Grand Calumet River identify the place of such disposal and amount thereof. If offsite, furnish the name and address of the transporter, the amount of water, and place to which such discharged or discarded waters were transported.
- 35. The CH2M HILL Phase I report states, at a number of

locations therein, that some information, data and information necessary to prepare the report was obtained by interviewing current or former employees. Furnish the names of all persons so interviewed, describe his or her current or former position with DuPont, supply the last known address of all former employees or third persons so interviewed and attach copies of all such interviews or reports of such interviews.

- 36. Page 3-4 of the CH2M HILL's report in describing WMU 4 states, "This WMU 4 consists of the onsite interim storage areas for hazardous wastes. The AgChem drum area contains wastes that were generated in the operation of the AgChem processes." With reference to the statements quoted, please:
  - A. Explain the actual period of time that an AgChem products was stored at such onsite location for each product mix formulated by, delivered to or processed by AgChem,
  - B. Describe the type of container used for such product while in the storage area,
  - C. Furnish all photographs in your possession which may depict the storage of such products,
  - D. Furnish the beginning and ending date of the AgChem operation, and
  - E. Furnish process flow charts of each and every chemical or formulation produced, prepared or engineered by the AgChem operation.
- 37. Did E.I. DuPont place any chemical, waste, product, personal property or soil into, upon or at the wetland on its property?
- 38. If the preceding question is answered in the affirmative, please:
  - A. Describe the chemical, waste, product or personal property that was so placed and
  - B. Indicate the starting and ending date of such

placement.

- 39. List all the pesticides ever formulated, manufactured, prepared, mixed or processed at the facility furnishing the beginning and ending date of such manufacture, preparation, mixture or processing and the amount of each such pesticide.
- 40. Has any employee, third party, or government agency ever communicate to E. I. DuPont that someone's death, bodily disease, or adverse health had been or could have been caused wholly or partially by any of the pesticides listed in response to Paragraph 18?
- 41. If "Yes" is supplied in response to the preceding question, then furnish a copy of all such communications if in writing and furnish a verbatim copy of all such oral communications.
- 42. CH2M HILL's Phase I report, at Figure 1-2, describes WMU 5, 14, 20 and 29 as still active operations. Describe the waste management practices at each of these units and furnish copies of state, local government and federal permits issued with reference to all these units.
- 43. When did the Freon Plant cease operations?
- 44. Do you have any information, reports, data or documents describing the amount of PCBs at any portion of the site or in the adjoining river but adjacent to the site? If so, furnish copies of all such reports, data, and documents.
- 45. What year and month did the site first begin discharging its wastewater into the East Chicago Sanitary District treatment plant and at what location at the site did such discharge first take place?
- 47. What process waters discharged into the East Chicago Sanitary District, if any, and over what period of time did such discharge take place?
- 48. Identify, per seep, its daily maximum flow for all current and former groundwater seeps at the site.
- 49. Has the company ever manufactured or produced chemicals, compounds or use processes which contained

mercury, nickel or cadmium.

- 50. Has the company ever manufactured or produced organic pesticides and/or herbicides.
- 51. If you answered "Yes" to the questions posed in paragraph 49 and/or 50, for one or both paragraphs furnish
  - A. Their chemical and compound name, including its trade name,
  - B. Their chemical composition,
  - C. The location at the premises where they had been manufactured or processed.
- 51. Have any of the chemicals, compounds, pesticides or herbicides been disposed of or discharged at the site?
  52. If "Yes" is the answer to the preceding question explain the circumstances, the date, and describe the chemical, compound, pesticide or herbicide and the quantify so disposed or discarded.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION 5**

# 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: DuPont Information Request

FROM:

Rodger Field, ORC

TO:

Duponters

Attached please find a draft of the long-anticipated DuPont information request. This includes questions from both RCRA and the Water Division. There may be additional questions which should be included based on recent information. If so, please provide them to me as soon as possible (i.e. by October 14 if possible). If I have any additional questions by the 14th, I will incorporate them and endeavor to have this out the following week.

Also, in response to various discussions I have had and memos from Bob Tolpa, and Vacys Saulys, I propose an internal meeting on October at 9:30 to review where we stand and determine the next steps in approaching DuPont. I will arrange a meeting room. Please let me know whether you can attend (at 6-6851). If the time is inconvenient, please provide alternative times and I will rearrange.

One item which we will have to discuss is the proposed meeting with DuPont on November 3. Personally, I would like to postpone this meeting until after we receive the response to the information request and therefore have a better sense of the enforcement handle we have on this facility. If this is not possible, we should discuss the nature of our participation in the meeting.

Thank you for your attention.

Addressees

Bob Tolpa, WQ-16J Vacys Saulys, HSE-5J
Jim Novak, WCC-15J Fred Micke, HSRL-6J
Bill Tong, WCC-15J Thad Slaughter, HSRW-6J

cc: Mike Mikulka, WCC-15J Jim Filippini, WCC-15J Joe Malek, HSM-5J

# DRAFT

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. E. F. Hartstein, Facility Manager E.I. DuPont Company 5215 Kennedy Avenue East Chicago, Indiana 46312

Re: Request for Information Pursuant to Section 104(e) of CERCLA and Section 3007 of RCRA for E.I. DuPont de Nemours and Co., Inc.

Dear Mr. Hartstein:

The United States Environmental Protection Agency (U.S. EPA) is currently investigating the source, extent and nature of the release of hazardous substances, pollutants or contaminants, on, at, or about the E.I. DuPont facility in East Chicago (hereinafter referred to as "the Site"). This investigation requires inquiry into the generation, storage, treatment, and disposal of such substances that have been released at the Site. A previous request for information was sent E.I. DuPont on or about September 13, 1991. A response was received by U.S. EPA on or about November 22, 1991. This request seeks additional and supplemental information which is required as part of U.S. EPA's ongoing investigation.

Pursuant to the authority of Section 104(e) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9604(e), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499 and Section 3007 of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6927, you are hereby requested to respond to the Information Request enclosed. Compliance with the enclosed Information Request is mandatory. Failure to respond fully and truthfully to each and every Information Request within twenty (20) days of receipt of this letter, or to adequately justify such failure to respond, can result in enforcement action by U.S. EPA pursuant to Section 104(e)(5) of CERCLA which, as amended, authorizes the United States to seek penalties from a Federal Court of up to twenty-five thousand dollars (\$25,000) for each day of continued non-compliance. "Non-compliance" is considered by U.S. EPA to be not only failure to respond to the Requests but also failure to respond completely and truthfully to each Request. Please be further advised that provision of false,

fictitious, or fraudulent statements or representations may subject you to criminal penalties of up to ten thousand dollars (\$10,000) or up to five (5) years of imprisonment or both under 18 U.S.C. Section 1001. The U.S. EPA has the authority to use the information requested herein in an administrative, civil or criminal action.

This Information Request is directed to your company, its officers, directors and employees, and its subsidiaries, divisions, facilities and their officers, directors and employees. This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. Section 3501, et seq.

Your response to this Information Request should be mailed to:

Rodger C. Field Associate Regional Counsel Office of Regional Counsel 111 West Jackson Chicago, Illinois 60604

Please direct any questions you may have to Rodger C. Field at (312) 886-6851.

Due to the seriousness of the problem at the Site and the legal ramifications of your failure to respond promptly and properly, U.S. EPA strongly encourages you to give this matter your immediate attention and to respond to these Information Requests within the time specified above.

Thank you for your cooperation in this matter.

Sincerely,

Gail C. Ginsberg Regional Counsel

Enclosure

bcc: Jim Novack, WD
Thad Slaughter, Office of RCRA, WMD
Fred Micke, Office of Superfund, WMD
Vacys Saulys, Office of Superfund, WMD

#### INSTRUCTIONS

- 1. A separate response must be made to each of the questions set forth in this Information Request.
- 2. Precede each answer with the number of the Information Request to which it corresponds.
- 3. In answering each Information Request, identify all contributing sources of information.
- 4. If information not known or not available to the Respondent as of the date of submission of its response should later become known or available, Respondent must supplement its response to U.S. EPA. Moreover, should the Respondent find, at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, respondent must notify U.S. EPA as soon as possible.
- 5. For each document produced in response to this request for Information, indicate on the document, or in some other reasonable manner, the number of the question to which it responds.
- 6. You must respond to the Information Request on the basis of all information and documents in your possession, custody or control or in the possession, custody or control of your former or current employees, agents, servants, contractors or attorneys. Furnish such information as is available to you, regardless of whether or not it is based on personal knowledge, and regardless of source.
- 7. Your response should be accompanied by a notarized affidavit from a responsible company official or representative stating that a diligent record search has been completed and that there has been a diligent interviewing process with all present and former employees who may have knowledge of the operations, hazardous substance use, storage, treatment, releases, spills, disposal or handling practices of the Respondent between June 1, 1992, and the date of this letter. To the extent that any information you provide relating to this Request is based on your personal knowledge, or the personal knowledge of your employees, agents, or their representatives, this information shall be in the form of a notarized affidavit.
- 8. If any documents requested herein have been transferred voluntarily or involuntarily to others or have been otherwise disposed of, identify each such document, identify the person to whom it was transferred, describe the circumstances surrounding such transfer or other disposition, and state the date or approximate date of such transfer or other disposition.

The information requested herein must be provided notwithstanding its possible characterization as confidential information or trade secrets. You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 C.F.R. 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent, and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. Federal Register 36902 et seq. (September 1, 1976); 43 Federal Register 4000 et seg. (December 18, 1985)]. If no such claim accompanies the information when it is received by U.S. EPA it may be made available to the public by U.S. EPA without further notice to you. You should read carefully the above-cited regulations, together with the standards set forth in Section 104(e)(7) of CERCLA, before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim, as stated in Section 104(e)(7)(ii) of CERCLA.

#### **DEFINITIONS**

For the purpose of the Instructions and Requests for Information set forth herein, the following definitions shall apply:

- 1. The term "you" or "E.I. Dupont" (hereinafter "DuPont") shall mean E.I. Dupont Company, its subsidiaries, its officers, managers, employees, contractors, trustees, predecessors, successors, assigns, subsidiaries, and agents.
- 2. The term "person" as used herein includes, in the plural as well as the singular, any natural person, firm, contractor, unincorporated association, partnership, corporation, trust or governmental entity, unless the context indicates otherwise.
- 3. "The Site" or "the Facility" shall mean and include the entire property on or about 5215 Kennedy avenue on the West and adjacent to the Grand Calumet River.
- 4. The terms "furnish", "describe", or "indicate" shall mean turning over to U.S. EPA either original or duplicate copies of the requested information in the possession, custody, or control of the Respondent. Where specific information has not been memorialized in any document but is nonetheless responsive to an information request, you must respond to the request with a written response. If such requested information is not in your possession, custody, or control then indicate where such information or documents may be obtained.
- 5. The term "identify" means, with respect to a natural person, to set forth his full name, present or last known business address, the name of that employer and a description of the job responsibilities of such person.

- 6. The term "identify" means, with respect to a corporation, partnership, business trust or other association or business entity (including a sole proprietorship) to set forth its full name, address, legal form (e.g. corporation, partnership, etc.) organization, if any, and a brief description of its business.
- 7. The term "identify" means, with respect to a document, to provide its customary business description, its date, its number if any (invoice or purchase order number), the identity of the author, addressor, addressee and/or recipient, and the substance of the subject matter.
- As used here, "document" and "documents" shall include writings of any kind, formal or informal, whether or not wholly or partially in handwriting (including by the way of illustration and not by way of limitation), any invoice, receipt, endorsement, check, bank draft, canceled check, deposit slip, withdrawal slip, order, correspondence, record book, minutes, memorandum of telephone and other conversations including meetings, agreements, and the like, diary, calendar, desk pad, scrap book, notebook, bulletin, circular, form, pamphlet, statement, journal, postcard, letter, telegram, telex, report, notice, message, analysis, comparison, graph, chart, paper or electronic recordings from any transportation monitoring device, interoffice or intraoffice communications, photostat or other copy of any documents, microfilm or other film record, any photograph, sound recording on any type of device, any punch card, disc, or disc pack; and any tape or other type of memory generally associated with computers and data processing (together with the programming instructions and other written material necessary to use such punch card, disc or disc pack, tape or other type of memory and together with printouts of such punch card, disc or disc pack, video tape or other type of memory); including (a) every copy of each document which is not an exact duplicate of a document which is produced, (b) every copy which has any writing, figure or notation, annotation or the like of it, (c) drafts, (d) attachments to or enclosures with any documents and (e) every document referred to in any other document.
- 9. "And" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of these Information Requests any information which might otherwise be construed to be outside their scope.
- 10. The term "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- 11. The term "Disposal" means the discharge, deposition, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or

discharged into any waters, including groundwaters, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.

- 12. The term "Hazardous waste" means a hazardous waste as defined in 329 IAC 3-6-1 and 3-1-7 and 40 CFR 261.3 and 260.10.
- 13. The term "Solid Waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from the industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923), as defined in Section 1004 of the Solid Waste Disposal Act, as amended.
- 14. The term "Storage" means the holding of hazardous or nonhazardous solid waste for a temporary period, at the end of which the solid waste is treated, disposed of, or stored elsewhere.
- 15. The term "Tank" means a stationary device, designed to contain an accumulation of solid waste.
- 16. The term "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character, or composition of any solid waste.

#### REQUESTS

- 1. Identify all persons consulted in the preparation of the answers to this Information Request.
- 2. Identify all documents consulted, examined, or referred to in the preparation of the answers to this Request and provide copies of all such documents.
- 3. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons including each person's mailing address, occupation and employer.
- 4. Describe all activities at the Site since 1980 which have involved the total or partial demolition of facility structures, process sewers, buildings, tanks or containers or

have involved the disposition of material after 1980 from the demolition of such structures, buildings, tanks or containers which occurred before 1980. Your answer for each such activity should include, but is not limited to, the following:

- a) Describe the location, size and the history of prior uses of the structure, process sewer, building, tank or container which was wholly or partially demolished and the date of demolition;
- b) Describe the nature and quantity of the debris and other hazardous and nonhazardous solid waste which was generated from each demolition activity;
- c) Describe the movement, storage, and subsequent disposal or disposition of all debris and other hazardous or nonhazardous solid waste which was generated from demolition activity. Your answer should be separately stated for each structure, process sewer, building, tanks or container and should include dates.
- d) State whether soil under or adjacent to any structure, process sewer, building, tanks or container was excavated, moved stored or disposed of in connection with each demolition activity. If so, please provide the information requested in subsection b) and c), above, for all such soil.
- e) Provide a detailed description of the methods and devices used to store or treat any debris and other hazardous and nonhazardous solid waste (including soil and water) resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates on which such storage occurred from 1980 to the present. Specify whether said debris and other hazardous and nonhazardous waste was stored in containers, tanks, surface impoundment, landfills, or piles.
- f) Provide copies of all tests, analyses, analytical results, manifests, or any other document containing data about any debris or other hazardous or nonhazardous waste (including soil and water) resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- g) Provide date(s) of shipment and the name and address of any person or place to whom any debris or other hazardous or nonhazardous solid waste resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from 1980 to the present.
- 5. Describe all activities associated with the generation, storage, treatment or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Units #2, 8, 4, 13 and 29, as referenced in CH2M Hill's Phase I Groundwater Assessment Report, dated February 22, 1992 for the East Chicago Facility,

from 1980 to the present. Your answer should set forth each unit separately and should be cross-referenced with the general information provided in CH<sub>2</sub>M Hill's Phase I Report. Your answer should include, but not be limited to, the following:

- a) Provide a detailed description of the size, location and historical use of each unit.
- b) Describe all hazardous or nonhazardous solid wastes stored, treated, or disposed from 1980 to the present in each unit, including the nature, quantity and dates of such storage, treatment or disposal.
- c) Provide a detailed description of the nature, quantity, and date(s) that any hazardous or nonhazardous solid wastes was removed from each unit from 1980 to the present, including disposition of waste which was removed and the date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped.
- d) Describe all operation and maintenance or other oversight activities undertaken with respect to each unit from 1980 to the present.
- e) Describe any treatment conducted on any hazardous or nonhazardous solid waste in each unit from 1980 to the present
- 6. Do you presently or have you ever discharged wastewater from the facility to the East Chicago Sanitary District treatment plant. If so, describe all process water which was discharged, including the duration of the discharge, type of process water etc.
- 7. For each groundwater seep which presently exists or has previously been known to exist at the facility, describe the daily maximum flow for the period such seep is known to have existed.
- 8. Provide all documents which relate to the information requested in the preceding questions. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

# ... DUPONT FOLLOW UP LETTER SEEKING SUPPLEMENTAL INFORMATION

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

HSM J5

Mr. E. F. Hartstein Plant Manager E.I. DuPont 5215 Kennedy Avenue East Chicago, IN 46312

Re: Request for Supplemental Information Pursuant to Section 104 of CERCLA and Section 3007 of RCRA, for the E. I. DuPont Site in East Chicago, Indiana hereinafter referred to as "the Site"

Dear Mr. Hartstein:

A recent staff briefing reveals that E.I. DuPont has initiated its own feasibility study to help identify some environmental risks at its East Chicago facility. There have been suggestions that such investigation may have been self-motivated emanating from DuPont's environmental policy. Should that be the case, DuPont is to congratulated for undertaking this initiative.

Both I and Mr. Dale Bryson, Director of Region 5's Water Division, also learned that your facility hosted a meeting during March inviting a group of employees from Region 5 and the State of Indiana anticipating that it could serve as to forum where the participants could exchange and share mutual ideas, solutions and concerns for the facility and surrounding community. Such cooperative efforts could prove to be of value both to DuPont and this Agency if productive of effective and efficient results at remediating concerns at and adjacent to your facility. For that reason both Mr. Bryson and I have encouraged our respective staff members to continue participating at similar conferences in the event that DuPont extended another invitation to meet.

Because there is a need for this Agency to have additional information about your East Chicago facility, a Supplemental Information Request is enclosed which requires a response within twenty days from the date of your receipt of this letter. You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 CFR 2.203(b). Information covered by such a claim will be

disclosed by U.S. EPA only to the extent, and only by means of the procedures, provided in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by U.S. EPA, it may be made available to the public by U.S. EPA without further notice.

Failure to comply with Supplemental Information Request or failure in responding fully, truthfully and in a timely fashion to all items requested may subject you to an enforcement action seeking to compel compliance and collect penalties of up to \$25,000 per day of noncompliance pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. Section 9604(e)(5). U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

Your response to this Information Request should be mailed to:

Joseph A. Malek
Superfund Program Management Branch (HSM-5J)
United States Environmental Protection Agency
77 West Jackson Street
Chicago, IL 60604

If you have any questions relating to this Supplemental Information Request, you may contact Mr. Malek at 312-353-2007 who will endeavor to answer your question or direct it to the appropriate person for response.

Sincerely yours,

David Ullrich, Director Waste Management Division

Enclosure

cc: Dale Bryson, Director Water Division

# . . STANDARD FOLLOW UP LETTER SEEKING SUPPLEMENTAL INFORMATION

HSM-5J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Dear Sir or Madam:

On (date 0, 1992) the United States Environmental Protection Agency (U.S. EPA) delivered an Information Request to (company name) pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. Section 9604(e). The Information Request was served on (company name at company address) by certified mail on the above date. This Information Request required your business to provide certain documents and information within 30 days of receipt of the letter. U.S. EPA received your response on (date), 1992. The (company name) response fails to answer a number of the requests fully and truthfully as required by these requests.

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U.S. EPA requests that you comply fully with the Information Request within fifteen (15)days of your receipt of this letter. A copy of that request is enclosed. You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 CFR 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent, and only by means of the procedures, provided in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by U.S. EPA, it may be made available to the public by U.S. EPA without further notice to (company name).

Continued failure to comply with U.S. EPA's Information Request by responding fully, truthfully and in a timely fashion to all items requested may subject you to an enforcement action seeking to compel compliance and collect penalties of up to \$25,000 per day of noncompliance pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. Section 9604(e)(5). U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

Your response to this Information Request should be mailed to:

Superfund Program Management Branch (HSM-5J)
United States Environmental Protection Agency
77 West Jackson Street
Chicago, IL 60604

If you have any legal or technical questions relating to this Information Request, you may consult the U.S. EPA. Please direct legal questions to \_\_\_\_\_\_\_ of the Office of Regional Counsel at (312) 000-0000. Other questions should be directed to Carlton D. Cuffman at (312) 353-9484.

Sincerely yours,

Thomas C. Marks, Chief Responsible Party Search Section

Enclosure

bcc: -----, CS-3T -----, HSR\_-6J D. Sheppard, HSM-5J C. Bohlen, HSM-5J



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WCC-15J

#### ENFORCEMENT SENSITIVE / ATTORNEY-CLIENT PRIVILEGE

DATE:

May 20, 1992

SUBJECT:

Information request for E.I. DuPont

FROM:

Bill Tong, WCC-15J Bill Tong

Water Compliance Section, WCC-15J

TO:

Steve Mendoza, CA-TUB-8 Office of Regional Counsel

Joe Malek, HSRLT-5J

Superfund Responsible Party Unit

As part of the ongoing coordination between Water Division and Superfund for the E.I. DuPont case, the following memorandum summarizes the Water Compliance Section's requests for information from E.I. DuPont to fill in data gaps and address sediment remediation.

#### Data Gaps

- 1. What month and year did DuPont begin discharging wastewater to the East Chicago Sanitary District treatment plant?
- 2. What process waste(s) did they discharge to the East Chicago treatment plant, and over what time period?
- 3. What is the daily maximum flow for each of the previously identified groundwater seeps on DuPont's property?

4. Did DuPont ever manufacture compounds or use processes which contained mercury, nickel, or cadmium?

5. What organic pesticides and/or herbicides did DuPont ever manufacture? What were the general chemical compositions of each of these pesticides or herbicides, especially if they were referred to by trade name?

CUMPUS M

cc: Jim Filippini, WCC-15J Jim Novak, WCC-15J Kurt Lindland, ORC-TUB-3

# Office of Enforcement

Matthew T. Klein
Hazardous Waste Section
Office of Enforcement
Indiana Department of Environmental Managment
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
(317) 233-6335
Fax: (317) 233-5968

#### **FAX TRANSMISSION COVER SHEET**

Date: November 13, 1996

To: Mr. Mike Mikulka

Fax:

Re:

EPA Region V

(312) 353-4788

Per Pat Carroll's request, attached is a draft Notice of Violation and Proposed

MM 11/13/96

Agreed Order for the inspection conducted by the Office of Solid and Hazardous Waste Management on April 28, 1994. The Office of Enforcement would like to discuss working the Orders of Cause No. H-12580 into the forthcoming EPA

corrective action order. Please call if you have any questions.

Sender: Matthew T. Klein

YOU SHOULD RECEIVE 9 PAGES, INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (317) 233-6335 or (317) 233-5529.



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh Governor Kathy Prosser Commissioner

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 Telephone 317-232-8603 Environmental Helpline 1-800-451-6027

#### NOTICE OF VIOLATION

To: E. S. Wollard, Jr., President
E. I. DuPont DeNemours
& Company, Inc.
1007 Market Street
M-10600
Wilmington, Delaware 19898

C. T. Corporation, Resident Agent
E. I. DuPont DeNemours
& Company, Inc.
1 North Capitol Avenue
Indianapolis, Indiana 46204

#### Cause No. H-12580

Designated representatives of the Indiana Department of Environmental Management (IDEM) conducted an inspection of E.I. DuPont DeNemours & Company, Inc., located at 5215 Kennedy Avenue, in East Chicago, Indiana, on April 28, 1994. The U.S. EPA I.D. number of your facility is IND 005174354.

The inspection revealed violations of Indiana Code (IC) 13-7 and the Hazardous Waste Management Rules under 329 IAC 3.1. This article incorporates July 1, 1992, federal standards for the management of hazardous waste, which have been published in 40 CFR 260 through 40 CFR 270.

The violations observed are as stated in Finding No. 7 of the enclosed proposed Agreed Order.

In accordance with IC 13-7-11-2(b), the Commissioner is required to notify you in writing that the Commissioner believes a violation exists and offer you an opportunity to enter into an Agreed Order providing for the actions required to correct the violations and for the payment of a civil penalty. The Commissioner is not required to extend this offer for more than sixty (60) days.

If settlement is not reached within sixty (60) days of your receipt of this Notice, the Commissioner may issue an order pursuant to IC 13-7-11-2(c) containing the actions you must

take to achieve compliance, the required time frames, and an appropriate civil penalty. Pursuant to IC 13-7-13-1, the Commissioner may assess penalties of up to \$25,000 per day of any violation.

The timely entry into an Agreed Order will prevent the necessity of an Order of the Commissioner being issued under IC 13-7-11-2(c) or the filing of a civil court action under IC 13-7-12 or IC 13-7-5-7. The advantages of entering into an Agreed Order are:

- 1. You may not be required to admit that any violation occurred.
- 2. The civil penalty may be less than that imposed under an Order of the Commissioner.



Please contact the Enforcement Case Manager, Matthew T. Klein, at (317) 233-6335 within fifteen (15) days after receipt of this Notice regarding your intent to settle this matter. If you are willing to resolve this matter as provided for in the enclosed Agreed Order, please sign and return it to Matthew T. Klein, Office of Enforcement, at the above address within the sixty (60) day settlement period.

FOR THE COMMISSIONER:

Date:	
We solve	Pat Carroll, Director
	Office of Enforcement

#### Enclosure

ce: Lake County Health Department (with enclosure)

Ms. L. Kyle Endris, Office of Legal Counsel (with enclosure)

Ms. Pam O'Rourke, Office of Enforcement (with enclosure)

Mr. Rick Roudebush, Office of Solid and Hazardous Waste Management (with enclosure)



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Evan Bayh Governor Kathy Prosser Commissioner



100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6016 Telephone 317-232-8603 Environmental Helpline 1-800-451-6027

STATE OF INDIANA	)	SS:		INDIANA DEPARTMENT MENTAL MANAGEMENT
COUNTY OF MARION	5			
COMMISSIONER OF THE			IT OF	)
ENVIRONMENTAL MAN	AGEMEI	NT,	;	
	Compla	inant,	;	CAUSE NO. H-12580
<b>v,</b> .			· ·	) .
E. I. DUPONT DENEMOU	IRS & CC	)MPA	NY, INC.	
	Respon	dent.	;	) )

#### AGREED ORDER

The Complainant and the Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order.

#### L FINDINGS OF FACT

- 1. Complainant is the Commissioner (hereinafter referred to as "Complainant") of the Indiana Department of Environmental Management (hereinafter referred to as "IDEM"), a department of the State of Indiana created by IC 13-7-2-11.
- 2. IDEM has jurisdiction over the parties and the subject matter of this action.
- 3. Respondent is B. I. DuPont DeNemours & Company, Inc. which is a company engaging in business at 5215 Kennedy Avenue, East Chicago, Lake County, Indiana, 46312.
- 4. Respondent's EPA I.D. No. is IND 005174354.
- 5. Respondent notified on August 18, 1980 as both a large quantity generator



("LQG") of hazardous waste and a treatment, storage and disposal ("TSD") facility for waste solvents. Respondent withdrew its TSD status on March 17, 1982.

- 6. In June 1991, Respondent re-built its on-site furnace. As a result of the furnace rebuild, Respondent generated seventy-one (71) fifty-five (55) gallon drums of both flue dust and refractory brick waste. On September 27, 1993, Respondent manifested the aforementioned seventy-one (71) fifty-five (55) gallon drums (approximately forty-three thousand (43,000) pounds) of both flue dust and refractory brick waste to Envirosafe Services of Ohio as a characteristically-chromium (D007) hazardous waste.
- 7. Based upon an investigation of the facility on April 28, 1994, by the Office of Solid and Hazardous Waste Management (hereinafter referred to as the "OSHWM") of the IDEM, the IDEM contends that the following violations were in existence or observed at the time of the inspection:
  - a. Pursuant to 329 IAC 3.1-1-10, IC 13-7-4-1(9) and 40 CFR 262.34(f), no person may commence or engage in the operation of any hazardous waste facility without having first obtained a permit from the department. Specifically, a generator who accumulates hazardous waste on-site for more than ninety (90) days is an operator of a storage facility and is in violation of and subject to the permit requirements of 40 CFR part 270 and the technical storage facility requirements of 40 CFR part 264 unless it has been granted an extension to the 90-day period. Based upon the information gathered by IDEM, Respondent had allowed storage of hazardous flue dust and refractory brick waste (D007) for greater than two (2) years without obtaining a permit and complying with the technical storage facility requirements.
  - b. Pursuant to 40 CFR 268.50(a)(1), the storage of hazardous wastes restricted from land disposal under Subpart C of 40 CFR 268 is prohibited, unless the generator stores such wastes in tanks or containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements of 40 CFR 262.34. Based upon the information gathered by IDEM, Respondent stored hazardous flue dust and refractory brick waste (D007) restricted from land disposal for greater than two (2) years, which is a violation of both 40 CFR 262.34 and 40 CFR 268.50.
  - c. Pursuant to 329 IAC 3.1-15-4, an owner or operator of a hazardous waste storage facility must establish financial assurance for closure of the facility. Based upon the information gathered by IDEM, Respondent failed to establish financial assurance for closure of the facility.



d. Pursuant to 329 IAC 3.1-15-8, an owner or operator of a hazardous waste storage facility must demonstrate financial responsibility for claims arising from the operation of said facility from sudden and accidental occurrences that cause injury to persons or property. Based upon the information gathered by IDEM, Respondent failed to demonstrate financial responsibility for claims arising from the operations of its facility from sudden and accidental occurrences that cause injury to persons or property.

NOV 13'96

- e. Pursuant to 40 CFR 262.11 and 40 CFR 268.7, a person who generates a solid waste, defined in 40 CFR 261.2, must determine if that waste is a hazardous waste. Based upon the information gathered by IDEM, Respondent failed to make a proper hazardous waste determination for its solid wastes, including flue dust and refractory brick.
- 8. Pursuant to IC 13-7-11-2(b), IDEM issued a Notice of Violation via Certified Mail to:

E. S. Wollard, Jr., President
E. I. DuPont DeNemours
& Company, Inc.
1007 Market Street
M-10600
Wilmington, Delaware 19898

C. T. Corporation, Resident Agent
E. I. DuPont DeNemours
& Company, Inc.
1 North Capitol Avenue
Indianapolis, Indiana 46204

9. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

#### IL ORDER

- This Agreed Order shall be effective ("Effective Date") when it is approved by the Complainant or her delegate, and has been received by the Respondent.
   This Agreed Order shall have no force or effect until the Effective Date.
- 2. Upon the effective date of the Order, Respondent shall make proper hazardous waste determinations, pursuant to 40 CFR 262.11 and 40 CFR 268.7, for its solid waste as it is generated at the point of generation. Further, Respondent shall manage its waste in accordance with the results of its hazardous waste determinations.
- 3. Within forty-five (45) days of the effective date of the Order, Respondent shall, pursuant to 329 IAC 3.1-15-4, establish financial assurance for the closure of the northern, northeastern, and eastern portions of the property outside and adjacent to the Ludox production building which stored both the hazardous flue dust and refractory brick waste (D007) for greater than two (2) years.



4. Within forty-five (45) days of the effective date of the Order, Respondent shall submit to IDEM for approval a closure plan, pursuant to 40 CFR 264 Subpart G. for the northern, northeastern, and eastern portions of the property outside and adjacent to the Ludox production building which stored both the hazardous flue dust and refractory brick waste (D007) for greater than two (2) years,

NOV 13'96

- 5. Upon IDEM's approval of the closure plan, referenced in Order No. 4, Respondent shall implement the plan as approved, and in accordance with the timeframes contained therein.
- б. All submittals required by this Agreed Order shall be sent to (unless notified otherwise in writing):

Mr. Matthew T. Klein Hazardous Waste Section Office of Enforcement Indiana Department of Environmental Management 100 North Senste Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

- 7. Respondent is assessed a Civil Penalty of \$32,000. Said penalty amount shall be due and payable to the Environmental Management Special Fund within thirty (30) days of receipt of notice of the adoption of this Order by the Complainant.
- 8. In the event the following terms and conditions are violated, the Complainant may assess and the Respondent shall pay a stipulated penalty in the following amounts:

Violation	Penalty
Failure to comply with each time frame specified in Orders 2 thru 5 of the Agreed Order.	\$100 per violation days 1-7 \$200 per violation days 8-30 \$500 per violation days 31-60 \$1000 per violation after 60 da

Said stipulated penalty shall be due and payable within thirty (30) days after Respondent receives written notice that the Complainant has determined a stipulated penalty is due. Assessment and payment of said stipulated penalty shall not preclude the Complainant from seeking any injunctive relief against the Respondent for violation of the Agreed Order.

In lieu of assessment of the stipulated penalty given above, the Complainant may seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreed Order, including, but not limited to, civil penalties pursuant to IC



13-7-13.

 Civil and stipulated penalties are payable by check to the Environmental Management Special Fund. Checks shall include the Cause Number and shall be mailed to:

NOV 13'96

Cashier
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

- 10. In the event that the civil penalty required by paragraph 7 is not paid within thirty (30) days of the effective date of this Agreed Order or the payment of the stipulated penalties assessed pursuant to paragraph 8 are not made within thirty (30) days of Respondent's receipt of IDEM's demand, Respondent shall pay interest on the unpaid balance at the rate established by IC 24-4.6-1-101. The interest shall begin to accrue on the date the Respondent receive IDEM's demand.
- 11. This Order shall apply to and be binding upon the Respondent, its officers, directors, principals, employees, agents, successors, subsidiaries, and assigns. The signatories to this Order certify that they are fully authorized to execute and legally bind the parties they represent. No change in ownership, corporate, or partnership status of the Respondent shall in any way alter its status or responsibilities under this Order.
- 12. The Respondent shall provide a copy of this Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall by contract require that all contractors, firms, and other persons acting for it comply with the terms of this Order.
- 13. This Agreed Order shall remain in effect until IDEM issues a Resolution of Cause letter to Respondent.

TD:500-0057

MAA 12 20 10.10 Mg.012 1.03



TECH	INICAL RECOMMENDATION	RESPONDENT	
Ву:	Pam O' Rourke, Acting Chief Hazardous Waste Section Office of Enforcement	Ву:	<u>, , , , , , , , , , , , , , , , , , , </u>
Date:	April 15, 1996	Date:	
COU	SEL FOR COMPLAINANT	COUNSEL FOR RESPONDED	TV
By:		Ву:	
	Office of Legal Counsel Department of Environmental		
	Management		
Date:		Date:	to the second
ENVI	OVED AND ADOPTED BY THE I RONMENTAL MANAGEMENTDAY OF		· vers
		[FOR THE COMMISSIONER]	
		Patrick Carroll Director Office of Enforcement	

#### PREINSPECTION FILES AUDIT CHECKLIST

		DATE: 74416
COM	PANY: DuPort INC.	BY: SAO
LOC.	ATTON: E. Chinage 5215 Konvey Luc.	
I.D.#	ZND 1 005 1 174 1354	
Type	of Inspection: GT-TSD-Closure-Compiaint-Other	(Please specify)
<b>A</b> .	GENERAL	
	<u>YE</u>	<u>z zo zi</u>
	1. Federal Nonfication on File 2. Federal Part A on File 3. Closure Plan Reviewed 4. Contingency Plan Reviewed 5. Biennial Report Reviewed 6. Part B Permit Reviewed (Note any Special Permit Conditions) Comments:  Chat Cress E. Manage	
		Mayer are Marie
8.	NOTIFICATION DATA (Notify type, waste codes listed.	etc.)
	F001 , F005	
<del></del> -		
Ç.	LAND DISPOSAL INFORMATION	· :
	1. List Waste and Land Disposal Facility	· ·

۵.	LIST POSSIBLE WAS	TE STREAMS NOT LISTED ON BIENNIAL REPO
		7007 Referting Brick & The Pres
ε.	LIST WASTE MANA PERMIT	GEMENT PRACTICES WHICH MAY REQUIRE
F.		Handling Codes), OR PART B PERMIT
	Coue Ar	Unit of Measure
	-	
	3	
	4	
G.	CLOSURE POST-CLO	SURE
	1. Are there any close	d units? If yes, describe.
<del></del>	COMPLIANCE BRAN	<u>CH</u>
	List past two inspection	ns and enforcement actions (CO, NOV, VL, WL)
	Date of Inspection	Action Type Date of Action
	and 01, 1994	and the second s
٠	1117	LUC
Rev	ised 7 (14/93 (2)	Premapection Checklist Page 2

1.	LIST UNRESOLVED ENFORCEMENT ACTIONS/VIOLATIONS
J	BRIEFLY SUMMARIZE PREVIOUS VIOLATIONS. (Note if they are repea
К.	LIST ANY ITEMS UNDER COMPLIANCE SCHEDULES WHICH ARE NOT YET COMPLETED OR VEED FIELD VERIFIED, INCLUDING WAS MINIMIZATION REQUIREMENTS IN ENFORCEMENT ORDER AND SETTLEMENT AGREEMENTS.
L.	COMMENTS

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Evan Bayh Governor Kathy Prosser Commissioner 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 Telephone 317-232-8603 Environmental Helpline 1-800-451-6027

Mr. Mike Mikulka
U.S. EPA Region V
DRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604



June 20,1996

Dear Mike:

As promised during our conversation on June 7, 1996, enclosed are the following RCRA inspection reports for the E.I. DuPont DeNemours & Company ("DuPont") facility located at 5215 Kennedy Avenue in East Chicago, Indiana:

- •RCRA inspection report dated December 9, 1980;
- •RCRA inspection report dated October 6, 1987; and
- •RCRA inspection report dated April 28, 1994.

Upon speaking with Scott Ormsby, a RCRA inspector in the Northwest Regional Office, it was learned that DuPont is slated for inspection shortly. You may call Mr. Ormsby at (219) 881-6739 to obtain this report when it has been prepared.

If you have any further questions, please feel free to call me at (317) 233-6335.

Sincerely,

Hath J. li

Matthew T. Klein Hazardous Waste Section Office of Enforcement

**Enclosures** 



## Indians Department of Environmental Management

## **VERIFICATION OF INSPECTION**

	I be to.		was conduct	id by the
undersigned company repre	nt. The inspection was conducted (RCRA), IC 13-7, and rules pand concurns noted during the inspections the inspections.	ucted to determine con premuigated pursuant the he inspection were ver- ection. The company	repliance with the to these statutes.	Resource
deficiencies as soon as possib violations: however, prompt of enforcement action which may	le. Carrections made and ve setion will be taken into cor be taken. A preliminary summary of the inspection. The summary	rifled during the inspection in determine violetions identified among the may identify violet	ection may still to ning the resolution as a result of the ions not noted d	e cited a on to an inspectio
the presession of the Depart misunderstandings which you IDEM: Printed Name	ment. The company is east	turaged to sentest th	e inspector to d	records in larify an
Scott Damsby	<del>- 0</del>		2H/981-	///
	Just Winds	EMIL	6739	7/24
KIRK MARAUK				7/24/
			-	
Companys Printed Name	Mguature	Pasition	Phone #	Date
Chet Ciecko	Mester J. Cieche	SHEA May		1
		SHEA Mays		1
				1
Chet Ciecko	Mester). Cieche	Address		1
Chet Ciecko	Mester). Cieche	Address		1

Laboratory Sample 10 ft: AB21471

MEC

PARAMETERS MEASURED:	RESULT:	UNIT:	MDL:	EXTRACT DATE:	ANALYSIS DATE:	ANALYST	REGULATORY EPA LIMIT	METHOD
TOTAL ENC IN BOLED	0.A15	MO/RO	0.300		7/21/94	PAL.		3050/7930
Metals TCLP RETAIN								
ARBENIC TOLP	< 0.004	Secon.	0,964	7/24@4	7/27/94	PAL.	. 5.0	131 8/7060
BARIUN TOLF	< 0,100	MGAL	0.300	7/23/94	7/24/94	PAL	100.0	1311/7000
CADMUM TCLP	< 0.002	MOVL "	0.002	7/21/94	7/21/94	PAL	1.0	1311/7138
CHRONIUM TCLP	< 0.010	MOVL	0.010	7/22/94	7/26/94	PAL	5.0	1311/190
COPPER TCLP	< 0,009	MG/L	0.009	7/21/94	7/21/94	PAL		1311/7310
LEAD TCLP	< 0.020	MOVE	0.020	7/2094	7/29/94	PAL	3.0	1311/7420
MERCURY TOLP	8.6013	MO/L	0,0002	7/2694	7/27/94	. TM	0.2	131 1/7471
NECKEL TCL>	< 0,010	MOZ	0.010	7/23/94	7/27/94	PAL		[3] 1/7520
SELENIUM TOLP	< 0.003	MG/L	0.003	7/22/94	3/27/94	PAL	1.0	1211/7746
SILVER TOLD	< ,862	MGAL	.002	7/23/94	7/20/94	PAL	3.0	1311/2760
THALLIUM TOLE	< ,010	MOAL	.010	7/21/94	722794	PAL		1919/7843
ZINC TCLP	0.157	MQ/L	0.006	7/22/94	7/35/94	DEO		1311/7930

ND - Not Detected At Parameter Mathod Detection Limit (MDL)



#### Laboratory Sample ID #: AB24395

#### E.I. DUPONT de NEMOURS AND CO.

#### Sample Identification: FLUE SWEEPINGS

Paraneters Measured:	RESULT:	UNIT	MDL	ANALYSIS DATE:	ANALYST	REGULATORY LIMIT:	METHOD
fetals TCLP METALS			·			·	· · · · · · · · · · · · · · · · · · ·
ARSENIC TCLP	< 0.001	MG/L	8.004	10/28/94	PAL	5.0	1311/7060
BARIUM TCLP	0.069	MO/L	0.050	10/28/94	PAL	100.0	13[1/7030
CADMIUM TCLP	9.943	MG/L	0.002	10/28/94	PAL	1.0	<u> 311/7130</u>
CHROMIUM TCLP	9.360	MQ/L	0.004	10/28/94	PAL	5.0	1311/7190
LEAD TCLP	< .010	MG/L.	.010	10/28/94	PAL	5.0	[3]1/7420
MERCURY TCLP	< 0.0010	MG/L	0.0010	10/28/94	PAL	0.2	1311/7471
SELENIUM TCLP	0,821	MO/L	9.003	10/28/94	PAL	1.0	1311/7740
SILVER TCLP	0.023	MO/L	.002	10/28/94	PAL	5.0	1311/7760
ANTIMONY TCLP	< 9.810	мол.	6.016	11/21/94	PAL		1311/7841
BERYLLIUM TCLP	< 8,881	MOIL	0.002	11/28/94	CLA		1311/7090
COPPER TCLP	< 8.00)	MO/L	9.809	10/28/94	PAL		<u> 3 1/72 0</u>
IRON TCLP	9.932	MO/L	0.001	10/27/94	PAL		1311/7380
MANGANESE TCLP	0,910	MOL	9.002	11/28/94	PAL		1317/7460
MOLYBOENUM TCLP	0.547	MOIL	0.010	11/21/94	DBO		1311/7480
NICKEL TCLP	0,638	MOR.	.003	10/28/94	PAL		1311/7520
THALLIUM TCLP	0.083	MGAL	9.024	10/27/94	PAL		1311/7841
VANADIUM TCLP	8,347	MGAL	0.010	10/27/94	PAL		1311/7911
ZINC TCLP	0.038	MOIL	0.004	10/28/94	PAL		1311/7950

Certified by:

#### General Conditions That Apply to All Special Waste Certifications:

- 1. The generator and/or the hauler shall provide the landfill with a copy of this certification along with advanced notification of intended disposal and provide a disposal notification form with each load disposed.
- 2. If nuisance or pollution conditions are created, immediate corrective action shall be taken.
- Waste material(s) accepted under this certification shall be included on the Special Waste Monthly Report submitted to this Office by the landfill.
- 4. Special Waste(s) may not be disposed at any landfill subject to corrective action under 329 IAC 10-21-13 or at any landfill which fails to maintain compliance with 329 IAC 10.
- It is the generator's responsibility to properly dispose of all wastes at acceptable sites. It is also the responsibility of the disposal site to notify the generators if the site's disposal status changes.
- 6. Any changes in the raw materials, the process(es) generating the waste, or the characteristics of the waste stream(s) shall be reported in writing to the IDEM and the disposal site prior to further disposal. If it is determined that the change is substantial, this certification shall be voided by written notification from IDEM.
- The waste(s) shall not contain free liquids.
- 8. The waste(s) shall not present a fire or explosion hazard.

## Special Conditions That Are Required For Disposal of the Waste(s) Will Be Indicated By The Reviewer's Initials:

/'·	Union 1 OFL strong of biological to the IDEM at the fittle of
	renewal of this certification. Each waste stream shall be analyzed
	separately.
2.	In addition to landfills specified under 329 IAC 10-8-2, waste(s)
	specified on this certification may also be disposed pursuant to
Λ. \	
Jaws.	This is an intended one time only disposal. If the disposal quantity
	substantially exceeds the amount anticipated, this Office shall be
	notified in accordance with General Condition Number 6.

Anticipated Disposal Quantity:

30 cubic yards

Reviewer/Date	4 delman
Reviewer/Date	6/26/96

CC:

Chet Cieko: DuPont Chemical

Post-It" brand fax transmittal	-4/6 nemo 7671	f of pages > 2
MIKALKA	Frem Z	MARAVOCO
Dapt.	Can IZ	EM
Fax 312-353-4788	19-83	1-67/3
7/88	219	-881-6745



### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh Governor Kathy Protect Commissioner

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 Telephone 317-232-8602 Environmental Helpline 1-800-451-6027

## Office of Solid and Hazardous Waste Management Special Waste Certification No. 60291

Pursuant to 329 IAC 10-8-8, the following generator:

**Dupont Chemicals** 5215 Kennedy Avenue East Chicago, IN. 46312

has received certification from the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, for the following waste stream(s):

Refractory Brick Material Waste

These wastes may be disposed at any sanitary landfill specified under 329 IAC 10-8-2 as an acceptable site for the disposal of waste which is certified as a special waste. A list of acceptable disposal sites is available from the Solid Waste Permit Section at the above address or by calling 317/232-4473. General and Special Conditions that apply to this certification are indicated on the reverse side.

This certification shall expire exactly 5 years from the effective signature date below.

Special Waste Section

Solid Waste Facilities Branch

Solid and Hazardous Waste Management

17/9/

DE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF ENFORCEMENT
HAZARDOUS WASTE SECTION

#### MATTHEW T. KLEIN

ENVIRONMENTAL SCIENTIST

INDIANA GOVERNMENT CENTER NORTH

100 NORTH SENATE AVENUE

TELEPHONE: (317) 233-6335 FAX: (317) 233-5968 P.O. BOX 6015 INDIANAPOLIS, IN 46206-6015

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MTKLEBOPN. DEM. STATE. IN. US

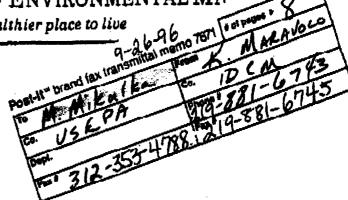
SHI



INDIANA DEPARTMENT OF ENVIRONMENTAL MAN

We make Indiana a cleaner, healthier place to live

Evan Bayh Governor Michael O'Connor Communicationer



August 12, 1996

VIA CERTIFIED MAIL 2 339 936 094

Chet Ciecko, SHEA Manager Dupont Chemical Co. 5215 Kennedy Ave. East Chicago, Indiana 46312

Dear Mr. Ciecko:

Re: Generator Status
Hazardous Waste Management
Compliance Evaluation Inspection
Dupont Chemical Co.
EPA I.D. No. IND 005 174 354
East Chicago, Lake County, IN

Representatives of the Department of Environmental Management (Department) are conducting inspections of facilities in Indiana that are engaged in the generation, transportation, treatment, storage, or disposal of hazardous waste. Facilities are being inspected to determine compliance with Indiana Code 13-7 (IC 13-7), recodified at Indiana Code 13-22 (IC 13-22), "Environmental Management Act," and Indiana Administrative Code, 329 TAC 3.1, "Hazardous Waste Management Permit Program and Related Hazardous Waste Management Requirements". These inspections and record reviews are also being conducted pursuant to the requirements of the Resource Conservation and Recovery Act (RCRA), Public Law 94-580, as amended, on behalf of the United States Environmental Protection Agency, (U.S. EPA).

This is to inform you that on July 26, 1996, I conducted an inspection of Dupont Chemicals Co. located at 5215 Kennedy Ave., East Chicago. You represented your firm at this inspection.

Based on information gathered during the inspection, it appears that your company generates less than 220 pounds (100 kg) of hazardous waste per month, or less than 2.2 pounds (1 kg) of acute hazardous waste per month. Therefore, your company is classified as a conditionally exempt small quantity generator. Our office will assume that you agree with this determination unless you inform us otherwise in writing. As a conditionally exempt small quantity generator, you are subject to the minimal

Generator Status
Dupont Chemical Co.
Page 2

requirements of 329 IAC 3.1-6 (40 CFR 261). Your company was found to be in compliance with these requirements. A copy of the inspection checklist is enclosed.

If you have any questions, please contact me at 219/881-6712. Your cooperation and efforts are appreciated.

Very truly yours,

Frett Why

Scott Ormsby Compliance Inspector Compliance Section Hazardous Waste Compliance Branch Solid and Hazardous Waste Management

SAO Enclosure

cc: Lake County Health Department Kay Nelson, NWO Director

# SMALL OUANTITY GENERATOR - RCRA INSPECTION REPORT

EPA ID # INA-005-174-35	Y NAME Du	pont Clamed Co.
MAILING ADDRESS:	5 Kannedy A	ve.
	liego, Im.	
LOCATION ADDRESS:	•	•
CONTACT: Chat Cicho	PHONE: 2/	9/391-4676
OWNERSHIP: Painte	COUNTY: a	Lake
ACTIVITY: (This should reflect	the actual functioning	of the facility)
LOG _ SQG _ CEG _	RANSPORTER	TSD UI
TRANSPORTERS: Air Rail	Hwy Wate	r Other
HAZARDOUS WASTE FUEL: OFF SPEC USED OIL FUEL: SPEC USED OIL FUEL MKTR BURNING DEVICE:	Gen Mktg burner	other mkter burner other mkter burner s boiler Indus furn
Person(s) interviewed:	Title:	Telephone:
chet ciedo	SHEA Manage	219/391-4676
Inspector(s):	Agency:	Telephone:
Scott Demoly	IVEM	219/881-67/2
Date of Inspection: 7/26/96	Time of l	Inspection 9:00 Aut

The Indiana Hazardous Waste Rules, 329 IAC 3.1, incorporates by reference federal standards which have been published in the Code of Federal Regulations as 40 CFR 260 through 40 CFR 270. Citations contained in this inspection form reference the federal rules as of July 1, 1990, except where the State rule substitutes full text language, in which case the specific 329 IAC 3.1 citation will be used

#### A. GENERAL INFORMATION

	below.
· · · ·	
2.	Type of Operation, Products Manufactured, Processes Utilized, Size
	Operation. Concentrate on processes that produce waste (hazardou
. h.b	port manifestures radium inhants and collected solices.
3.	Hazardous Wastestreams
	Description/EPA NO: DOOR DOOS Lab Waste  Generation Rate: Bealtma   start LDR Group: WW NON-WV  Disposition:
	Description/EPA NO: Doo Bule Herman Constitution Rate: LDR Group: WWNON-WW Disposition:
	Description/EPA NO: Generation Rate: LDR Group: WW NON-WW
4.	Have both listed and characteristic
	waste codes been assigned, where a listed exhibits a characteristic? 40 CFR 268.9
5.	Does the facility handle any California List Wastes? (liquid hazardous waste with greater than 50 ppm PCB, greater than 134 ppm nickel, greater than 130 thallium,
	etc.)
6,	Exempted/Excluded Hazardous Waste Streams and Reason for Exem

			Comments
busto gallona		DM.	
List Transporte	ers Used by the Co	mpany:	
AFTS, Inc.	NID - 080-63	11-369	
·		•	
Non-Hazardous Wuste Streams		Rate	Disposition
	سال معلى مطلقة لي	STP Sage Tons	en on-site L
ue Dunt	3		yan Prince
poeten Brick	4. D	Le Varies	1
0			
the company do	cument questionab	le waste streams are	non-hazardous as
the company do		Conen dumning dumni	
Note any non-without pretream	RCRA violetions	(open dumping, dumpi iHA, etc.)	
Note any non-without pretream	RCRA violations timent program, OS	(open dumping, dumpi SHA, etc.)	ing in city sever
n the company do imed?  Note any non-without pretreat	RCRA violations timent program. OS	(open dumping, dumpi iHA, etc.)	ing in city sever

<sup>&</sup>quot;If hazardous waste on-site waste exceeds 6,000 kilograms, the generator must comply with requirements for large quantity generators.

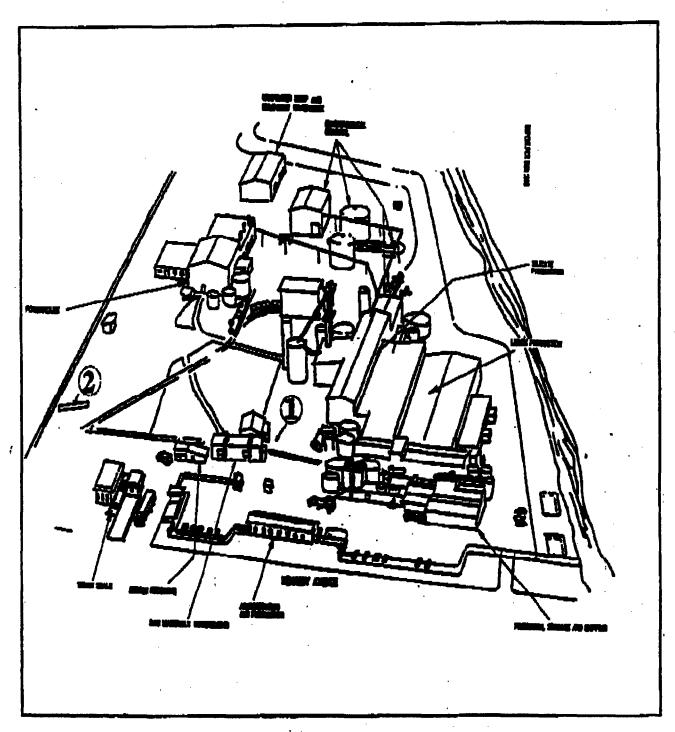
DuPont East Chicago

PEM-D-06-2

SUBJECT: PLANT EMERGENCY MANUAL/ EMERGENCY CONTROL PLAN:

HEADCOUNT

Page 2 of 2



Assembly Areas for Headcounts

Primary - South of Mechanical Shop (1) (2)

Secondary - East of Scale House Office, by Wagner board

## GRAND CALUMET RIVER INITIATIVE SURVEY

Facility:	Durant	Cle	weeks	<u></u>		
Inspector:	South	Demo	by			•
Date of Ins	pection:	7/26/9	4			_
i. By what	means is the	sanitary	wastewater treated	?		Septic Tank/ Leach Field Septic Tank/ Drywell Package Plant w/ Discharge Sanitary Sewers Other
2. Does the	facility generation:  Autority Autority  Autor	rate proc	ess wastewater?	sten	Yes i	No to conside
		<del></del>		<del></del>		. 00
3. Where i	is the process	wastewa	ter discharged?			Stream, Ditch Grand C.
						Storm sewer
						Sanitary sewer
•						Not sure
	c facility have				Yes	
Permit :	number: 2	N 6000	239			
						1.:
	•	•	itment system?		Yes_\	No_ City East Chiese
Pretreati	ment Permit n	umber:_		l	ssuing	City East Charge
to the en	vironment? ( v material sto	(e.g Vel rage.)	nicle maintenance,			n the discharge of pollutants aning, degreasing, leakage
If yes, desc	eribe: //	מתיט	roted	<del></del>		· · · · · · · · · · · · · · · · · · ·
7. Are ther	e obvious sig None		staining or runoff			e activities?

Grand Cal Initiative / thm/3.21.90



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh Governor Kathy Proseer Commissioner 100 North Senate Avenue P.O. Box 6015 Indianapolio, Indiana 44206-6015 Telephone 317-232-8603 Environmental Helpline 1-800-451-6027

### Office of Solid and Hazardous Waste Management Special Waste Certification No. 60351

Pursuant to 329 IAC 10-8-8, the following generator:

DuPont Chemical 5212 Kennedy Avenue East Chicago, IN 46312

has received certification from the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, for the following waste stream(s):

waste water filter sand and rocks

These wastes may be disposed at any sanitary landfill specified under 329 IAC 10-8-2 as an acceptable site for the disposal of waste which is certified as a special waste. A list of acceptable disposal sites is available from the Solid Waste Permit Section at the above address or by calling 317/232-3111. General and Section 217/232-3111.

This certification shall expire signature date below.

Gregory C. Lorenz, Chief Special Waste Permit Section Solid Waste Facilities Branch Solid and Hazardous Waste March Solid and Hazardous Waste March Section Solid and Hazardous Waste March Section Solid and Hazardous Waste March Section Se

Ludox 75 Colloidal 10
5/1/20, not

Sdidon silicote

Αn

ENC.

#### GENERATOR - RCRA INSPECTION REPORT

EPA ID IND 005 174 354	NAME _E.I.DuPont	DeNemours & Co.
MAILING ADDRESS: 5215 Ker	nedy Avenue	
_East_Ch:	icago, Indiana 46312	
LOCATION ADDRESS: Above		
<del>-</del>		
		19/398-4653
CONTACT: O.J. Meyer		
OWNERSHIP: _E.I. DuPont De	eNemours COUNTY:	Lake County
	ive 3=Dead Mai -handler 2=Obsolete of business	<pre>1 4=PCB handler ID # 9=Superfund site</pre>
ACTIVITY: (This should facility)	reflect the actual	functioning of the
LQG SQG CEG _X	TRANSPORTERT	SD UI
TRANSPORTERS: Air R	ail Wa	ter Other
Person(s) Interviewed:	Title:	Telephone:
O. J. Meyer_	Area Manager	Above
E. F. Hartstein	Plant Manager	219/391-4601
Inspector(s):	Title:	Telephone:
Rick Roudebush	Env. Mgr. II	317/233-4637
Ashely Insco	Env. Mrg. II	317/232-3451
Beth Guria	Env. Sci. III	219/881-6707
Date of inspection: Apri	1 28, 1994 Time of	inspection: _llam

Hazardous Waste Management Permit Program and Related Hazardous Waste Requirements, 329 IAC 3.1, incorporates by reference federal standards for the management of hazardous waste which have been published in the code of federal regulations in 40 CFR 260 through 40 CFR 270 as of July 1, 1990. Citations contained in this inspection form shall be to the federal rules as incorporated, except where the State rule substitutes full text language, in which cases the specific 329 IAC 3.1 citation will be used.

1)	Verify EPA I.D. No. IND 005 174 354 (HWIMS 090)
2)	Type of Facility (G, T, TSD) based on inspectionCEG
3)	Type of Operation, Products Manufactured, Processes Utilized, Size of Operation. Concentrate on processes that produce waste (hazardous or non-hazardous)!
	The DuPont facility in East Chicago, Indiana manufactures sodium silicate ("Ludox") and colloidal silica as the only products at this plant. Calcium silicate (with a small amount of calcium sulfate) is the only waste stream generated from the production process. The calcium silicate actually is generated from the pretreatment wastewater system, as a "cake" after dewatering. The waste is landfilled on-site at the facility.
4.	HAZARDOUS WASTE STREAMS
GEN	COSITION: LDR GROUP:NON-
DES	RIPTION/EPA #:LDR GROUP:WWNON-
WW	
DIS	POSITION:
GEN	RIPTION/EPA #:LDR GROUP:WWNOW-
DES	ERIPTION/EPA #:LDR GROUP:WWNON-
WW	POSITION: LDR GROUP:WWNON-
DES	RIPTION/EPA #:
GEN	ERATION RATE: LDR GROUP:WWNON-
DTG	POSTTON:

5)	Have bo	oth listed	d and characteristic was waste exhibits a charac	ste codes cteristic	been assigned, ? 40 CFR 268.9	
6)	Does the facility handle any California List wastes (liquid hazardous waste with greater than 50 ppm PCB, greater than 134 ppm nickel, greater than 130 thallium, etc.)					
	NA					
L Y P D R G O	S C E R A T P M A T E R I A L	spen batt	all wastes not listed t materials, sludges, leries and scrap metals gory for each material	oyproduct . Check	s, scrap	
		Waste	Process Generating	Rate	Disposition	
X _	- <b>-</b>	Ca Sil.	<u>Wastewater Treatment</u>	various	LF On-Site	
	. – –					
_ =	. – =					
<del>-</del> -		<del> </del>	·			
			<u>.</u>			
		. ————				
	-					

	Waste Generation Type Rate	How reclaimed & by Who	Quantity stored on Site
A.	NA		
в.			
c.			
D.			
9)	If any of the wastes are replease check those areas and		
			YES NO
	A) Waste Oil Fuel - Append	dix A	
	B) Lead Acid Batteries - 7	Appendix B	
	C) Hazardous Waste Fuel -	Appendix C	
	D) Precious Metals - Appe	ndix D	
	E) Use Constituting Dispos	sal - Appendix E	
10)	Hazardous Waste On-Site Amou	nt How Stored	Comments
No	hazardous waste on-site at	time of inspection	
			· ·
		-	· · · · · · · · · · · · · · · · · · ·
		<del></del>	
	•		

11) <u>Viol</u>	Is ation	the s #1)	Annual	Report	Accu	rate? <u>No</u>	(See	Descrip	tion of	
12)	List	Tran	sporters	Used by	the	Company				
			any Docu s as Cla		stio	nable Wast	te Stre	eams are	·	

Does this facility have any processes or activities which require a permit or a Part A permit application? If so, please list those activities by

Without Pretreatment Program, OSHA, etc.)?

Note any non-RCRA Violations (Open Dumping, Dumping in City Sewer

14) Additional Comments:

code or description below!!!

(See Attached Trip Report) In 1991, DuPont had the facility furnace re-built, which generated 71 - 55 gallon barrels of "flue dust" and refractory brick. Dupont assumed the waste was non-hazardous, because the Material Data Safety Sheet (MSDS) indicated the bricks to be made of trivalent chrome. Dupont also had a manufacturers' statement indicating that trivalent chrome was in the bricks.

In May, 1992 Dupont took a grab sample of the waste and the testing indicated the waste contained hexivalient chrome. After referring to a consultant, DuPont re-sampled the waste in March, 1993 (obtaining a representative sample) and the results also showed the waste to fail a TCLP for chrome. (See attachment A-test results from 5/5/92, 3/26/93 and 7/26/93)

September 27, 1993 DuPont manifested the waste off-site as "hazardous waste" (D007) to Enviorsafe Services of Ohio.

See Description of Violations #1

13)

B. <u>LAND BAN TREATMENT STANDARDS</u> (HWIMS 700)	<u>OK</u>	<u>DF</u>	<u>NI</u>	<u>NA</u>
1) Does generator dilute prohibited wastes to meet treatment standard criteria, or render them nonhazardous, as a substitute for adequate treatment? 40 CFR 268.3		·		$\checkmark$
2) Do treatment standards for listed wastes cover constituents that may cause the waste to exhibit any characteristics? 40 CFR 268.9		_		$\sqrt{}$
3) Does generator specify alternative treatment standards for lab packs? If yes, see 40 CFR 268.42(c)(2)				$\checkmark$
4) Does generator mix wastes with different treatment standards for a constituent of concern?				
a. If yes, did generator select most stringent treatment standards?			<u> </u>	1
5) Does the generator handle any wastes with a LDR variance (national capacity, case-by-case, etc.)?				$\checkmark$
a. If yes, list the waste and variance.		<del>-</del>	<u>_</u>	····
C. ON-SITE TREATMENT (HWIMS 700)  1) Does the generator treat wastes in 90-day tanks or containers? If NA, go to next section.				
2) Does the generator treat the wastes to meet appropriate treatment standards?	_	_		
a. If yes, has the generator prepared a waste analysis plan detailing the frequency of testing to be conducted?  40 CFR 268.7(a)(4)		_	_	
Revised 7/27/93 (8) Generator - RCRA Inspection Report			Page	1

3)	Does the pian himil the following:	<u>0K</u>	DF	<u>N</u> I	
	a. Based on a detailed chemical and physical analysis of a representative sample	+			
	b. Contains information necessary to treat the wastes in accordance with LDR		\	-	
. 4)	Has the plan been filed with the Regional Administrator or IDEM?				
5)	Are characteristic wastes which have been rendered nonhazardous shipped to a solid waste facility?				
			•		$\overline{}$
	a. If yes, is a notification and a certification for each shipment sent to the Regional Administrator (prior to 2/24/92) or IDEM? 40 CFR 268.9(d)(1) and 268.7(b)(5)	- <del></del>			
D.	MANIFEST SYSTEM (HWIMS 1	10)			
1)	For hazardous waste shipments to Indiana facilities (or hazardous waste shipments to states that do not supply manifests) has the generator used the Indiana Hazardous Waste Manifest?  329 IAC 3.1-7-4	<u></u>			
2)	Does the operator have copies of the manifest available for review?  40 CFR 262.40 (329 IAC 3.1-7-6)	<u></u>	<del></del>		_
3)	Have manifests been retained for 3 years? (40 CFR 262.40)	<u> </u>			
4)	Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipment during that period.				
5)	Do the manifest forms examined contain the following information? 40 CFR 262.21 (329 IAC 3.1-7-8)	<u>/</u>	<del></del>		_
	sed 7/27/93 (9) Generator - RCRA Inspection Report			Page	8

			<u> </u>	175	-11	
	a.	Manifest Document Number? EPA ID No. + Unique 5 digit No.?		_		
	b.	Name, mailing address, telephone number, and EPA ID Number of generator?				_
	c.	Name, telephone number (3.1-7-11) and EPA ID Number of Transporter(s)?				
	d.	Name. Address, telephone number (3.1-7-11) and EPA ID Number of designated permitted facility?				
	e.	The description of the waste(s) (DOT shipping name,DOT hazard class. DOT identification number)?	1			
	f.	The total quantity of waste(s) and the type and number of containers loaded?	$\checkmark$			
	g.	Required waste minimization certification?				
	h.	Required signatures?				
	i.	EPA hazardous waste numbers (3.1-7-11)?				
	j	Handling Codes (3.1-7-11)?	_/			<del></del>
	k.	Additional waste numbers included in box J.	$\checkmark$			
6)		the designated facility an approved D facility?	$\checkmark$			
7)	of with	hazardous waste manifests to the Department hin five (5) working days after shipping tardous waste? (This requirement applies to the Indiana's and other states hazardous ste manifests).  329 IAC 3.1-7-6	<u> </u>	<u> </u>		

8)	<b>Rep</b>	ortable exceptions: CFR 262.42 (HW)	IM5	·	DE	<b>\</b> 'T	
	a.	For manifests examined (except for shipme within the last 35 days), enter the number manifests for which the generator has NO receive a signed copy from the designated facility within 35 days of the date of shipment.	of T	<u>OK</u>	DE —	<u> </u>	<u>√</u>
	b.	For manifests indicated in question (7a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Commissioner.		<del></del>			
E. E	PA_[	DENTIFICATION NUMBERS		<u>ok</u>	DF	- <u>NI</u>	<u>NA</u>
1)	Nui trai	s the generator received an EPA Identificate mber prior to treating, storing, disposing of, asporting, or offering for transportation.  ardous waste? 40 CFR 262.12(a)		$\checkmark$			•
2)	to '	s the generator offered his hazardous waste transporters or to TSD facilities that have eived an EPA Identification Number?  CFR 262.12(c)	<b>;</b>	<u>/</u>			
F. <u>I</u>	NTE	RNATIONAL SHIPMENTS		(HWIMS	190)		
1)	hazaı (If a	the installation imported or exported rdous waste? 40 CFR 262.50 nswered Yes, complete the following oplicable.)					
	<b>a.</b>	Exporting hazardous waste; has the generat	tor:				•
		i. Notified the administrator and OSHWM/IDEM in writing?					

	ii. Obtained the signature of the		<u>Ur</u>	<u>'41</u>	77
	foreign consignee confirming delivery of the waste(s) in the foreign country?	<del></del>	<del></del>		$\sqrt{}$
·	iii. Met the manifest requirements?		<u>.</u>		<u> </u>
	b. Importing hazardous waste: has the generator met the manifest requirements?	<del></del> .	~ <del>~~</del>		<u> </u>
	·				
	G. LAND BAN NOTIFICATION REQUIREMENTS	(HWIM	IS 700	))	
	1) Does the generator provide a notification to the TSD facility with each shipment, even if waste meets treatment standards? 40 CFR 268.7	<u> </u>			
	2) Does the notification include the following: (if possible, make copies of, or record information from notification(s) that do not contain the necessary information) 40 CFR 268.7				
	a. EPA hazardous waste number	$\sqrt{}$		<del></del> -	
	b. Treatment standards (for wastes other than F001-F005 and F039, treatment standards may be referenced by including sub-category, treatability group, and CFR sections and paragraph where treatment standards appear)	<u>√</u>			
	c. Where treatment standards is specified technology, applicable five-letter treatment code?	$\checkmark$			
	d. Manifest number	$\frac{\checkmark}{}$			
	Revised 7/27/93 (12) Generator - RCRA Inspection Report			Page	:

								<u> </u>	DF	71	
	e.	or if all for lab	vaste mee ternate tr packs are oper cert	eatment specifie	standards d. does i	i C		1			
	f.	Waste a	nalysis da	ita, if ava	ailable.						
	notic othe	ces, certi r docum	erator retifications. lentation (5) years	waste at produced	nalysis da I pursuan	ta, and		<u> </u>			
<b>H</b> . ]	REC	ORDKE	EPING A	AND RE	PORTIN	<u>G</u>					
1)	wast gene	e determ	erator manination for the facil	or all so	lid wastes ling corre	5		./		,	
	stan	dard? 4	0 CFR 2	62.11 an	d 40 CFF			<u>_V_</u>	·		
	stan	dard? 4	list below	62.11 an	d 40 CFF		IMS 10	00)	·		
	stan	dard? 4	0 CFR 2	<u>62.11 an</u> :	d 40 CFF	(HW		00) Classificat	tion		
	stan	dard? 4	lo CFR 2	<u>62.11 an</u> :	d 40 CFF	(HW			cion		
	stan	If DF, Assigned Which	lo CFR 2	ication	nethods of	(HW	orrect (	Classificat	cion		
	a.	If DF, Assigned Which employ a) K b) A	list belowed Classifi	ication llowing redeterm of waste	nethods dunation?	(HW	genera	Classificat			

	If a written plan is describe the waste presented by the constant of the const	not available, liminimization prompany representation by Dulond he	rogram as ntative.	oted al	hcit	;adaus	-
mir	If a written plan is describe the waste presented by the co	not available, liminimization prompany representation by Dulond he	rogram as ntative.	oted al	hc. 7	-codais	_
mir	If a written plan is describe the waste presented by the co	not available, liminimization prompany representation by Dulond he	rogram as ntative.	oted al	hcit		-
mir	If a written plan is describe the waste presented by the co	not available, l minimization prompany represe	rogram as ntative.	oted al	· hat		_
mir	If a written plan is describe the waste presented by the co	not available, l minimization prompany represe	rogram as ntative.	<u>~</u>			-
				<u>~</u>			-
		<b>-</b>					
	IL MINIMEATION	,		/			
WAS	TE MINIMIZATION	· /H	WIMS 100)				
<del></del>						· · · · · · · · · · · · · · · · · · ·	
25 T	equired? (329 IAC )	3.1-7-14) (HWI	MS 180)				
Нас	the generator submi	rted Riennial R	enorrs	<u>OK</u>	DF	71	7
<del></del>	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	<del></del>		<del></del>	<del></del>	
						· · · · · · · · · · · · · · · · · · ·	
			<del></del>		<del></del>		
40 (	CFR 262.40	(HWI	MS 180)	•			

2) Does the Biennial Report include the required waste minimization information?	<u>QK</u>	DĘ	NI	NA
(329 IAC 3.1-7-14/IC 13-7-27)				
3) Note any discrepancies between the written or oral on-site waste minimization activities.	plan, and	observ	ed	<del></del>
	······································			
		<del></del>		-
			<del></del>	<del>-</del>
J. PERSONNEL TRAINING RECORDS				
1) Do personnel training records include: (HWIMS	130)			
a. Job titles for the positions related to HWM 40 CFR 265.16(d)1	$\checkmark$			
b. The name of the employees filling each job title? 40 CFR 265.16(d)(1)	$\checkmark$	. <del></del>		
c. Job descriptions including the required skills, education, or other qualifications and the duties of the personnel assigned to the position? 40 CFR 265.16(d)2	✓	<del></del> ,		
Check categories for which job titles/descriptions are include the <u>supervisors</u> of each category in that cate documents).	re availablegory whe	e (plea n revie	se wing	
Emergency coordinator Training coordinator Emergency Inspectors Material handlers Container labelers Necordkeepers	ency respondences fanifesters	onse pe	rsonne	l <u> </u>
d. Description of both introductory and continuing training required for each job?  40 CFR 265.16(d)(3)				<del></del>
Describe in general the type of training program in	use at th	ne facili	ity.	
Class Coom. OTI				
				J

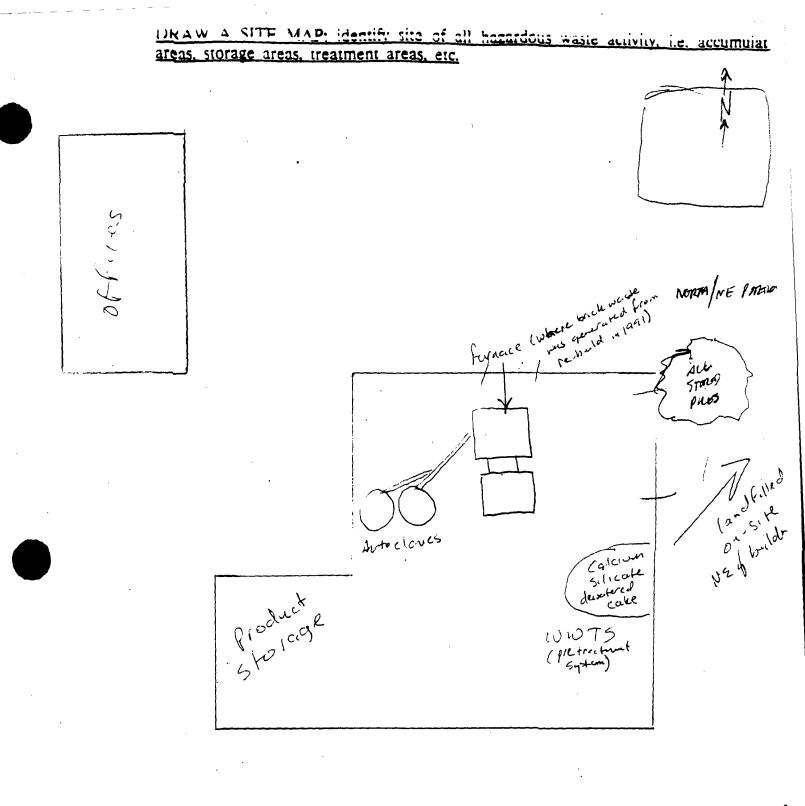
•	<u> </u>	DF	71
e. Records of training required in (d)? 40 CFR 265.16(d)4	$\checkmark$		
f. Did facility personnel receive the required training, including:			
i) Classroom or on the job			
ii) Within 6 months of hire	_	<del></del>	
iii) Annual review of training?	<u> </u>	<del></del>	
g. Are all training records maintained for current personnel and for at least three years for former employees?  40 CFR 265.16(e)	✓		
	·····		<del></del>
2) Employee Training Checklist:  Track at least three employees through their training prophree years. Include date and type of training received, equired training list provided by the facility.	Check	against	
b) Employee Name c) ]  Job Title  Training  Received  Received	Employe Job T Train Recei	itle ng	
I did not specifically clede individu	ucl en	player	<u></u>

# K. <u>CONTINGENCY PLAN AND EMERGENCY PROCEDURES</u> [as required by reterence in 40 CFR 262.34]

,	info	rmation: (HWIMS	150)			
		· •	<u>ok</u>	DF	<u>NI</u>	NA
	a.,	The actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable)				
	b.	Arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to 265.52(c)?				
	c.	Names, addresses, and phone numbers of all persons qualified to act as emergency coordinators? 40 CFR 265.52(d)	$\checkmark$			_
	d.	A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities? 40 CFR 265.52(e)				
	<b>c.</b>	An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation. evacuation routes, and alternate evacuation routes.) 40 CFR 265.52(f)	<u> </u>		·ــــــــــــــــــــــــــــــــــ	
					<del></del> 1	

a.	Is the facility Emergency Coordinator identified?	<u> </u>	<u>DF</u>	<u> </u>	<u> </u>
b.	40 CFR 265.52(d)  Is coordinator familiar with all aspects of site operation and emergency procedures?  40 CFR 265.55		· 		
c.	Does Emergency Coordinator have the authority to carry out the Contingency Plan?  40 CFR 265.55	4			
<u>PRI</u> [as	EPAREDNESS AND PREVENTION required by reference in 40 CFR 262.34]				
		<u>OK</u>	DF	<u>N</u>	<u> </u>
arra of a	the owner or operator attempted to make ngements with local authorities in case in emergency at the facility?  CFR 265.37 (HWIMS 140)	<u> </u>			
the	copies of the Contingency Plan available at site and local emergency organizations?  CFR 265.53 (HWIMS 150)				
the	site and local emergency organizations?				
the 40	site and local emergency organizations?				
3) Em	site and local emergency organizations?  CFR 265.53 (HWIMS 150)	<u>√</u>			
3) Em	ergency Procedures  n emergency situation has occurred at this lity, has the Emergency Coordinator owed the emergency procedures listed in CFR 265.56?	<u>√</u>		Page	

	Was the IDEM Emergency Response Section notified of all releases which threatened or could have threatened human health or the environment outside the facility?  24-hr. Emergency Response number 241-4336	<u> </u>	<u>DF</u>	<u> </u>	NA.
		•	· · · · · · · · · · · · · · · · · · ·		
_					
					·



Remember to take photos and document as well as possible all violations

Revised 7/27/93 (20)

Generator - RCRA Inspection Report

Page P

## GENERATOR ACCUMULATION APPENDIX (HWIMS 120)

Location/Description of Unit	0-110-1991
A. GENERAL OPERATING REQUIREMENTS  OK DF N	<u>I NA</u>
1) If waste is being shipped off-site is it properly packaged, labeled and marked per DOT regulations?  40 CFR 262.30-262.32	
No voule on-site at the	<del></del>
2) Is the container clearly marked with the start of accumulation date?  40 CFR 262.34	
3) Has the generator accumulated hazardous waste on-site for 90 days or less?  40 CFR 262.34	Description lolations #2
4) Do wastes remain in accumulation tanks for more than 90 days?	/
5) Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?  40 CFR 262.34	
B. SATELLITE ACCUMULATION (HWIMS 120)	
1) Are containers marked with the words "Hazardous Waste" or with other words identifying the contents?	
2) Are containers in good condition, compatible with the wastes in them and stored closed?	

No waste on-site at time of inspect

#### **CONTAINER MANAGEMENT APPENDIX**

(HWIMS 160/410) 40 CFR Part 265 as referenced by 262.34

Locati	on/Des	scription	of Unit _	0007 - was	les fism	firnace	se-bu	الل.،اط	1991	
	•						<u>OK</u>	<u>DF</u>	<u>NI</u>	<u>NA</u>
A.	GENE	RAL C	PERATIN	G REQUIR	<u>EMENTS</u>	<u> </u>				
	1.		ntainers in on? <u>(40 CF</u>	good R 265.171)						<u> </u>
	2.			mpatible wit 10 CFR 265.						
	3.			anaged to pr (65.173 (b)	event			_	·	<u> </u>
	4.		ntainers sto R 265.1736	ored closed? (a))				<del></del>		<u> </u>
	5.	stored from the	at least 15 he property	reactive was meters (50 line? (Indicole or reactive)	feet) ate					<u> </u>
	6.	separa: provisi	te containe	wastes store rs? (If not the CFR 265.17(1265.177(a))	he		_	———		
	7.	separa other sufficie	ted or pro			·			-	· <u>/</u> .
	8.	special ignitation	l requireme de, reactive	e, or ites addresse						
		a. b. c.					<u>√</u>		<u> </u>	<del>-</del>
Revis	sed 5/2	27/93 (1	)	Containe	r Manage	ement .	Append	ix	Page	27

	•			<u>QK</u>	DE	M	
	3.	have a	the container storage area to the container storage area.				<u>√</u>
	10.	leaks,	ontainers inspected weekly for deterioration, corrosion, er factors? (40 CFR 265.174)	_			
B.	PREP	ARED	NESS AND PREVENTION				
	1.		ty - Do security measures include: FR 265.14) (TSD facilities only) (HWIM	<b>1S</b> 300)			
		a.	24-hour surveillance which continuously monitors and controls entry?				
		b.	Artificial or natural barrier around facility and controlled entry at all times?	<u></u>			
		c.	Danger sign(s) at entrance?			<del></del>	
	2.	of a financial of a f	ne facility been maintained and ted to minimize the possibility ire, explosion, or release of dous waste or hazardous waste tuent? (40 CFR 265.31) MS 140/340, 810 spill)	_/			
	3.		uired, does the facility have the ing equipment: (HWIMS 140/340)	·			
	·	a.	Internal communications or alarm systems? (40 CFR 265.32(a) and 40 CFR 265.34(a))	_			
		<b>b.</b>	Telephone or 2-way radios at the scene of operations? (40 CFR 265.32(b)&40 CFR 265.34(b)				· ·
		c.	Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? (Please specify)				

			<u>OK</u>	DF	Й	NA
		d. Water at adequate volume and pressure to supply water hoses, foam equipment automatic sprinklers or water spray equipment available? (Please specify) (40 CFR 265.32(d))				
	4.	Whenever waste is being handled do all personnel have immediate access to an alarm or communication device (thru another employee if always available)? (40 CFR 265.34(a)) (HWIMS 140/340)	<u></u> ✓			
C.		TING AND MAINTENANCE OF EMERGENC IMS 140/340)	Y EC	OUIPM	ENT	
	1.a.	Has the owner or operator established testing and maintenance procedures for emergency equipment? (40 CFR 265.33)	<u>√</u>			
	1.b.	Is the emergency equipment in operable condition? (40 CFR 265.33)	_/			
·	2.	Does the owner or operator maintain adequate aisle space for the movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment? (This applies to access for this equipment to reach hazardous waste management areas) (40 CFR 265.35)	_/			
Addit	ional	Comments: No waste was on-s the turns of the inspect	site	at		·
••••••••••••••••••••••••••••••••••••••		the time of the inspect	ton			
			<del> </del>	<del></del>		

1640 Grand Avenue Western Springs, IL 60558

1150 Junction Avenue - Schererville, Indiana 463/5 1-219-322-25 1-800-428-3311 Fax 1-22-0440



Date:

5/5/92

4/23/92 Recd:

24-174 W) #:

DuPont

Laboratory Smp 10 No.:

DESCRIPTION:

inless otherwise noted; esults in parts per

REPORT TO:

lack Ely

**IEC** 

illion - ppm1

PARAHETERS:

AB00353

Furnace Flu Dust

4/21/92

		ty the training the training of the contract o				<u> </u>
TOTAL	REACTIVE		TOTAL	EP TOXICITY	TCLP	
>200°F		SILVER		·	<0.002	
	·	ARSENIC			0.189	
29.17		BARIUM			<0.050	
12.0		CADMIUM			0.005	
99.67		CHRONIUM***			78.7	
<0.4	(0.4	MERCURY			(0.0001	
0.677	<0.677	LEAD			0.055	·
0.539		SELENIUM			0.141	<u> </u>
Pass						
<5				·		7
62						3.00
				`		
		-				
			*** Total			
	>200°F  29.17  12.0  99.67  <0.4  0.677  0.539  Pass  <5	29.17 12.0 99.67 <0.4 0.677 0.539 Pass <5	TOTAL       REACTIVE         >200°F       SILVER         ARSENIC       BARIUM         12.0       CADMIUM         99.67       CHROWIUM***         <0.4	TOTAL REACTIVE SILVER    SILVER     ARSENIC     BARIUM     12.0   CADMIUM     99.67   CHROMIUM****     (0.4   MERCURY     0.677   (0.677   LEAD     0.539   SELENIUM     Pass     (5     62	TOTAL REACTIVE SILVER  >29.0°F SILVER  ARSENIC  BARIUM  12.0 CADMIUM  99.67 CHROWIUM***  (0.4 (0.4 MERCURY  0.677 (0.677 LEAD  Pass  (5 62	TOTAL         REACTIVE         TOTAL         EP TOXICITY         TCL P           >200°F         SILVER         ⟨0.002           ARSENIC         0.189           29.17         BARIUM         ⟨0.050           12.0         CADMIUM         0.005           99.67         CHROMIUM***         78.7           ⟨0.4         MERCURY         ⟨0.0001           0.677         ⟨0.677         LEAD         0.055           0.539         SELENIUM         0.141           Pass         ⟨5         ⟨5           62         ⟨0.0001         ⟨0.0001

certified by: Catherine Oct, Wigel



#### 1150 Junction Avenue - Schererville, Indiana 46375 1-219-322-2560 • 1-800-428-3311 Fax 1-219-322-0440

REPORT TO: Jack Ely NEC 4640 Grand Avenue Western Springs, IL 60558

Date:

5/5/92

Recd:

4/23/92

WO #:

24-174

BPA METHOD SW 846-8080

Laboratory Smp ID No.:	AB00353				I	T	
DESCRIPTION:>	Furnace Flu Dust						
results in milligram/ kilogram - mg/kg PARAMETERS:	4/21/92						
PCB's as:							
AROCHLOR 1016	ND						
AROCHLOR 1221	ND		1				
AROCHLOR 1232	ND:						
AROCHLOR 1242	ND						
AROCHLOR 1248	ND						
AROCHLOR 1254	ND						
AROCHLOR 1260	ND						
	1						
TOTAL PCB	ND						· · ·
	<u></u>						,
	í	<u></u>					
	l			·			
	<u>'</u>	1	!				
	<u> </u>						ي الملق
	- /1						

NI)=NotaDetected at 1 mg/kg.

certified by: Catherine Oct Duck

1-219-322-0450 • 1-800-643-1835

REPORT TO:

4640 Grand Avenue

Western Springs, II. 60558

Jack Bley

DuPont

9-322-0440

Pales

Reed:

3/17/93

M) #:

24-2806

Laboratory Smp 10 No.:	AB11934			
DESCRIPTION: — > Unless otherwise noted; es:lls in parts per	Soil Composite	Practical Quantitation Limits	Regulatory Level (mg/L)	EPA HW Humber
PARAMETERS:	3/16/93	(PQL)		
SEMI-VOLATILE-TOLP ORGANICS	•			
Cresol, total	ND.	0.010 ppm	200.0	D026
1,4-Dichlorobenzene	ND	6.010 ppm	7.5	D027
2,4-Dinitrotoluene	ND	0.010 ppm	0.13	D030
lie xachlorobenzene	ND	0.010 ppm	0.13	D035
Hexachlorobutadiene	ND	0.010 ppm	0.5	D033
Hexachlorethane	ND	0.010 ppm	3.0	D034
Witrobenzene	ND	 0.010 ppm	2.0	<b>D</b> 036
Pentachlorophenol	ND	0.010 ppm	100.0	D037
Pyridine	ND	0.010 ppm	5.0	D038
2,4,5-Trichlorophencl	ND	0.010 ppm	400.0	D011
2,4,6-Trichlorophenol	ND	0.010 ppm	2.0	D042
			r i	1



# TENCO ENVIRONMENTAL LABORATORIES

1150 Junction Avenue - Schererville, Indiana 46375 1-219-322-2560 • 1-800-428-3311 Fax 1-219-322-0440

REPORT 10:

Jack Ely MEC 4640 Grand Avenue Western Springs, II. 60558

Date: 5/5/92

Recd: 4/23/92

**10** 1: 24-174

DuPont

laboratory Smp 10 No.:	AB00353					
PESCRIPTION: —>  Unless otherwise noted; esults in parts per  Ulion - ppm] PARAMETERS:>	Furnace Flu Dust 4/21/92			Petection Limits	Regulatory Level (mg/f,)	5PA HW Number
VOLATILES-ZHE ORGANICS*					-	
enzene	ND			0.002 ppm	0.5	- D018
Carbon Tetrachloride	ND			0.002 ppm	0.5	D019
Chlorobenzene	ND			0.002 ppm	100.0	D021
Heloroform	ND			0.002 ppm	6.0	D055
1,2-Dichloroethane	ND			0.002 ppm	0.5	0058
1,1-Dichloroethylene	ND			0.002 ppm	0.7	D029
Hethyl Ethyl Ketone	ND			0.002 ppm	200.0	D035
Tetrachloroethylene	ND			0.002 ppm	0.7	D039
Trichloroethylene	ND			0.002 ppm	0.5	DONO
Vinyl Chloride	ND			0.002 ppm	0.2	
		<del> </del>	<del></del>			ه منان
*ZHE=Zer dspace Extract	ion			1	A.,	<i>i</i>



1150 Junction Ave - Schererville, Indiana 46375 1-219-32 60 • 1-800-428-3311

Fax 1-219-322-0440

Date: 5/5/92

Recd: 4/23/92

₩0 F: 24-174

REPORT TO: Jack Ely MEC 4640 Grand Avenue Western Springs, IL 60558

DuPont

Laboratory Smp 1D No.:	AB00353					
DESCRIPTION: —> Unless otherwise noted; esults in parts per illion - ppm)	Furnace Flu Dust			Detection Limits	Regulatory Level (mg/L)	EPA HW Number
PARAMETERS:	4/21/92					
SENI-VOLATILES-TCLP ORGANIC	<b>S</b> *			·		
Cresol, total	ND			0.002 ppm	200.0	D026
1,4-Dichlorobenzene	ND			0.002 ppm	7.5	D027
2,4-Dinitrotoluene	ND			0.002 ppm	0.13	D030
Hexachlorobenzene	ND			0.002 ppm	0.13	0032
Hexachlorobutadiene	ND			0.002 ppm	0.5	D033
Hexachlorethane	ND			0.002 ppm	3.0	DO 34
Nitrobenzene	ND			0.002 ppm	2.0	D036
Fentachlorophenol	ND			0.002 ppm	100.0	D037
Pyridinė	ND			0.002 ppm	5.0	D038
2,4,5-Trichlorophenol	0.612			0.002 ppm	400.0	D041
2,4,6-Trichlorophenol	ND			0.002 ppm	2.0	D042
						·
				•		
						يه الملق
			<del></del>			

\*Analysis performed after Toxicity Characteristic Leaching Procedure (TCLP). ND=Not Detected



4640 Grand Avenue

Western Springs, IL 60558

DuPont

1152 Junction Avenue - Schererville, Indiana 46375 1-219-322-0450 • 1-800-643-1835

Fax 1-219-322-0440

L'L

Pater 3/26/93

**Reeds** 3/17/93

**100 %** 24-2806

Laboratory Sup 10 No.:							
Lateratory Smp IV No.:			AB11934				
PESCRIPTION: —> [Unless otherwise noted; results in parts per million - ppm] PARAMETERS:			Soil Composit	e	TCLP BK	PLEADURA 75	male
	TOTAL	REACTIVE		TOTAL	EP TOXICITY	TCLP	
FLASHPOINT-(140°F)	>200°F		SILVER			(0.002	
Percent Acidity			ARSENIC			0.239	ì
Percent Alkalinity	22.6		BARIUM			0.094	i
pH (2-12,5**)	12.1	-	CADMIUM			0.002	
Percent Total Solids	87.43		CHRONIUM***			26.1	
SULFIDE	(0.4	<0.4	MERCURY			(0.0010	_i_
CYAN1 DE	0.145	(0.145	LEAD			0.054	
PHENOL	<b>&lt;0.018</b>		SELENIUM			0.094	
Paint Filter Test	Pass						
TOX	15						
				<u></u>			
		<u> </u>					<u> </u>
				<del></del>			
				*** Total		13 1	بالمكافق

TUPP PROPE

CARL ANTIFOSMA Certified by:

n Killy



REPORT TO:

4640 Grand Avenue

Western Springs, IL 60558

Jack Bley DuPont

1152 JUNCTION AVENUE - SCHELETARIE, MULINIA HOUSE 1-219-322-04 1-800-643-1835 Fax 322-0440

Pales

3/26/9

Reed:

3/17/93

24-2806



Laboratory Sup 10 No.:	AB11934						
DESCRIPTION: —> Unless otherwise noted; esults in parts per illion - ppm; PARANETERS:	Soil Composite				Practical Quantitation Limits (PQL)	Regulatory Level (mg/L)	EPA HV Number
	3/16/93						
POLATILE-ZHE ORGANICS"			<u> </u>	<b> </b>		<u> </u>	<u> </u>
Benzene	ND				0.010 ppm	0.5	D018
Carbon Tetrachloride	ND				0.010 ppm	0.5	D019
Chlorobenzene	ND				0.010 ppm	100.0	D021
Chloroform	ND				0.010 ppm	6.0	D022
1,2-Dichloroethane	ND				0.010 ppm	0.5	D028
1;1-Dichloroethylene	ND	,			0.010 ppm	0.7	D029
Methyl Ethyl Ketone	ND				0.310 ppm	200.0	D035
Tetrachloroethy lene	ND				0.010 ppm	0.7	D039
Trichloroethylene	ND			·	0.010 ppm	0.5	7 DO 40
Vinyl Chloride	ND				0.010 ppm	0.2	D043
		<u> </u>		<u> </u>			<del> </del>
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			<del>                                     </del>				adh et
7HE-Zero Headanace Extrac	Ton		<del> </del>		- <del> / </del>	<del></del>	

THE-Zero Readspace Extraction

contidend for millilia



REPORT TO: Jack Riey DuPont 4640 Grand Avenue Western Springs, II. 60558



Dates

3/26/93

Recd:

3/17/93

W #:

24-2806

Laboratory Smp 10 No.:	AB11934				
DESCRIPTION: —> Unless otherwise noted; results in parts per	Soil Composite			Practical Quantitation Limits	Regulatory Level (mg/L)
PARABETERS:	3/16/93			(PQL)	
SEMI-VOLATILE-TCLP ORGANIC	•				
Cresol, total	ND	<u></u>		0.010 ppm	200.0
1,4-Dichlorobenzene	ND			0.010 ppm	7.5
2,4-Dinitrotoluene	ND			0.010 ppm	0.13
lie xachlorobenzene	ND			0.010 ppm	0.13
Hexachlorobutadiene	ND			0.010 ppm	0.5
Hexachlorethane	ND			0.010 ppm	3.0
Nitrobenzen <del>e</del>	ND			0.010 ppm	2.0
Pentachlorophenol	ND			0.010 ppm	100.0
Pyridine	ND			0.010 ppm	5.0
2,4,5-Trichlorophencl	ND			0.010 ppm	100.0
2.1,6-Trichlorophenol	ND			0.010 ppm	2.0
					,
					V: 1
*Analysis performed after MD=Not Detected	foxicity Charac	teristic leach	TCLP). Certified by:	Wild 1	Disc

TENCO ENVIRONMENTAL LASS
1192' JUNCTION AVENUE
SCHERERVILLE IN 46375
(219) 322-0450 (800) 643-1635
FAX (219) 322-0440

Sample 10 No. AB31783. Date Received 07/22/93-Date Collected 07/21/93 Time Collected Report Date 08/02/93



CERTIFICATION NOS.: ILLINOIS 100210 WISCONSIN 999317770 CALIFORNIA 1214 NEW JERSEY 55634

Ken Jacyk DuPont 5215 Kennedy Avenue East Chicago, IN 46312 P.O. NOL
Proj. NO. 25-963
Samp.Desc.- FLUE DUST SAMPLE
Sample Collector

RES	<b>WL</b> T	MDL	ANALYSIS DATE	INIT	METHODOLOGY	
****		•••••	******	••••	*********	
>500	DEG. F .	200	07/26/93	DTG	1010 \$4846	
30.6	<b>x</b>	0.001	07/29/93	DTG		
90.02	x	a <b>.</b> at	07/26/93	TH	2540-\$GL10\$	
<0.4	MG/KG	0.4	07/27/93	DTG	3W846 9030	
<0.4	MQ/KG	0.4	07/27/93	DTG	\$11846	
<0.024	MG/KG	0.024	07/28/93	RH	\$W846	,
0.294	NG/L	0.0110	07/28/93	DTG	5530(C)	,
PASSED	PASS/FAIL		07/23/93	KC	9095	
130	MG/L	5	07/27/93	RM	54846 9020	
0.153	MG/L	0.010	07/28/93	PAL	1311/7060	
0.002	HG/L	.002	07/28/93	PAL	1311/7760	
0.7595	HG/L	J.0 <b>5</b> 0	07/26/93	VΤ	1311/7080	
<0.002	MG/L	0.002	07/27/93	PAL	1311/7130	
31.898	MG/L	0.004	07/26/93	VT	1311/7190	
<0.0010	MG/L	0.0010	07/29/93	RM	1311/7471	
0.047	MQ/L	.010	07/27/93	٧٢	1311/7740	
0.033	HG/L	.010	07/28/93	PAL	1311/7420	
	>200 30.6 90.02 <0.4 <0.024 0.296  PASSED 130 0.153 0.002 0.059: <0.002 31.878 <0.0010 0.047	30.6 X 90.02 X 40.4 MG/KG 40.4 MG/KG 40.024 MG/KG 0.294 MG/L PASSED PASS/FAIL 130 MG/L 0.153 MG/L 0.002 MG/L 40.002 MG/L 40.002 MG/L 40.0010 MG/L 40.0010 MG/L	>200 DEG. F. 200  30.6 X 0.001  90.02 X 0.01  <0.4 MG/KG 0.6  <0.4 MG/KG 0.6  <0.024 MG/KG 0.024  0.296 MG/L 0.010  PASSED PASS/FAIL  130 MG/L 5  0.153 MG/L 0.010  0.002 MG/L 0.050  <0.002 MG/L 0.002  31.898 MG/L 0.004  <0.0010 MG/L 0.0010  0.0047 MG/L 0.010	>200 DEG. F. 200 07/26/93  30.6 X 0.001 07/29/93  90.02 X 0.01 07/26/93  <0.4 MG/KG 0.4 07/27/93  <0.04 MG/KG 0.4 07/27/93  <0.024 MG/KG 0.4 07/27/93  0.296 MG/L 0.010 07/28/93  PASSED PASS/FAIL 07/23/93  0.133 MG/L 5 07/27/93  0.133 MG/L 0.010 07/28/93  0.002 MG/L .002 07/28/93  <0.002 MG/L 0.010 07/28/93  <0.002 MG/L 0.002 07/28/93  <0.002 MG/L 0.002 07/28/93  <0.002 MG/L 0.002 07/28/93  <0.002 MG/L 0.002 07/27/93  31.898 MG/L 0.004 07/26/93  <0.0010 MG/L 0.0010 07/29/93  0.047 MG/L 0.0010 07/29/93	>200 DEG. F. 200 07/26/93 DTG  30.6 X 0.001 07/29/93 DTG  90.02 X 0.01 07/26/93 TM  40.4 MG/KG 0.4 07/27/93 DTG  40.4 MG/KG 0.4 07/27/93 DTG  40.024 MG/KG 0.024 07/28/93 RM  0.296 MG/L 0.010 07/28/93 DTG  PARSED PASS/FAIL 07/23/93 KC  130 MG/L 5 07/27/93 RM  0.153 MG/L 0.010 07/28/93 PAL  0.002 MG/L 0.002 07/28/93 YT  40.002 MG/L 0.002 07/28/93 VT  40.002 MG/L 0.002 07/27/93 PAL  21.898 MG/L 0.002 07/27/93 RM  40.0010 MG/L 0.002 07/27/93 RM  40.0010 MG/L 0.001 07/29/93 RM	>200 DEG. F. 200 07/26/93 DTG 1010 \$W846  30.6 X 0.001 07/29/93 DTG  90.02 X 0.01 07/26/93 TM 2540-50LIDS  <0.4 MG/KG 0.4 07/27/93 DTG \$W846 9030  <0.4 MG/KG 0.4 07/27/93 DTG \$W846  <0.024 MG/KG 0.024 07/28/93 RM \$W846  0.296 MG/L 0.0110 07/28/93 DTG 5530(C)  PASSED PASS/FAIL 07/28/93 DTG 5530(C)  0.153 MG/L 5 07/27/93 RM \$W846 9020  0.153 MG/L 0.010 07/28/93 PAL 1311/7060  0.002 MG/L 0.002 07/28/93 PAL 1311/7760  <0.002 MG/L 0.002 07/28/93 VT 1311/7080  <0.002 MG/L 0.002 07/27/93 PAL 1311/7130  21.898 MG/L 0.004 07/26/93 VT 1311/7190  <0.0010 MG/L 0.0010 07/27/93 RM 1311/7740





PAGE 2 SAMPLE NO. AB14783 Ken Jacyk

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۱				:	AMALYSIS		
į	ANALYSIS	RES	ULT	MOL	DATE	INIT	METHODOLOGY
1	CYANIDE	<0.024	NG/KG	0.024	07/28/93	RM	SW846-9010
1	:   BENZENE"	NOT DETECTED	MG/L	0.20	07/28/93	<b>6</b> 2	SW846 8021
	CARBON.TETRACHLORIDE*	NOT DETECTED	MG/L	0.20	07/28/93	G\$	SW846 8021
	CHLORGBENZENE*	NOT DETECTED	MG/L	2.00	07/28/93	GS	\$\\ <b>8</b> 46 8021
1	CHLOROFORM*	NOT DETECTED	NG/L	1.00	07/28/93	GS	\$¥846 8021
	1,2-DICHLORGETHANE*	NOT DETECTED	MG/L	0.20	07/28/93	GS	SW846 8021
ļ	1,1-DICHLOROETHYLEME*	NOT DETECTED	MG/L	0.40	07/28/93	<b>6</b> \$	SW846 8021
	METHYL.ETHYL.XETONE*	NOT DETECTED	MG/L	2.00	07/28/93	C\$	SW846 8021
	TETRACHLORGETHYLENE*	NOT DETECTED	MG/L	0.40	07/28/93	G\$	SW846 8021
	TRICHLOROETHYLENE*	NOT DETECTED	HG/L	0.20	07/28/93	GS.	\$V846 8021
	VINYL.CHLORIDE*	NOT DETECTED	MG/L	0.08	07/28/93	G\$	SW846 8021
1	CRESOL, TOTAL**	NOT DETECTED	MG/L	2.00	07/29/93	33	\$W846 8270
	1,4-DICHLOROSENZENE**	NOT DETECTED	MG/L	2.00	07/29/93	22	SW846 8270
	2,4-DINITROTOLUÉNE**	NOT DETECTED	MG/L	0.08	07/29/93	\$\$	SW846 8270
	MEXACHLOROSENZENET*	NOT DETECTED	MG/L	0.08	07/29/93	55	SW846 8270
	HEXACHLOROBUTADIENE®®,	NOT DETECTED	MG/L ,	0.20	07/29/93	<b>5</b> \$	SW846 8270
	HEXACHLOROSTHANS**	NOT DETECTED	MG/L	1.00	07/29/93	\$\$	SW846 8270
	MITROBENZENE®#	NOT DETECTED	MG/L	0.50	07/29/93	22	SW846 8270
	PENTACHLOROPHENOL**	NOT DETECTED	MG/L	1.00	07/29/93	22	SW846 8270
	PYRIDINE®P	NOT DETECTED	HG/L	2.00	07/29/93	\$\$ `	SW846 8270
1	2,4,5-TRICHLOROPHENOL**	NOT DETECTED	MG/L	2.00	07/29/93	33	SW846 8270
i	· 						

Continued on next page.



PAGE 3 SAMPLE NO. AR1478

TENCO ENVIRONMENTAL LASS

A

ANALYSIS
ANALYSIS
RESULT
MDL
DATE INIT METHODOLOGY

2,4,6-TRICHLOROPHENOL\*\*..... NOT DETECTED Mg/L
0.50
07/29/93 88 54846 8270

SHEEDSTONE END OF REPORT SHEEDSTONE

COMMENTS "Volatile ZHE Organics "Semi-volatile TCLP Organics

CERTIFIED BY

CARL L. ANDREWS



nay on engine one con

Indiana department of environmental management office of solid and mazardous waste management P.O. Box 7035 Indianapolia, in 46207-7035 Attachner KB

	INIFORM HAZARDOUS 1. Generator's	•	Manifest Document h	] 2	Page 1 Int	ermstion in the required by	139 Expires 8-30- he shadad aress r Federal law, it nd K are required
	WASTE MANIFEST INDO05	1.74354.	00002	٠,	of Sta	No law.	
3.	Generator's Name and Malling Address E. I. du Pont de Nemours &	Co., Inc.		1	-	_ ^	_
	5215 Kennedy Avenue			-		<u>8490</u>	The second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery will be a second livery with the last livery will be a second livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery with the last livery will be a second livery will be a second livery with the last livery will be a second livery will be a secon
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4.	Generator's Phone ( ) Fransporter 1 Company Name	(219) 391-46( 6. US EPA ID Numb					P210 -0000
•,	Matlack Systems Inc.	DED9.811101	•	. ਰਿ	Transporter's	Phones	00-433-8
7.	Transporter 2 Company Name	E. US EPA IO Numo		E	Brate Transp	orter's RD	00-423-0
•				. E	Transporter's	Phone	et i
<b>b</b> .	Designated Facility Name and Site Address	10. US EPA ID NUMB	er	0	State Facility	'e ID	<del> </del>
	Envirosafe Services of Ohi	io Inc.		The state of			•
	876 Otter Creek Road	1		H	Facility's Pho		
	Oregon, OH 43616-7571	OHD045243	706	<u>. L</u>	419-25	5-5100	
	HE BOY Branching Hadridge Branch Branch Alexandr	second Class and IO North	12. Cont	riners	13. Total	14. Total	(. Wasse No.
11.	US DOT Description (Including Proper Shipping Name, H	esera Ciess, ena ID Numbi	No.	Type	Quantity		THE NO.
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Þ	Hazardous Waste Solid NOS						Harris
	(Furnace Flue Dust) 9 NA30	77 PgIII	30	DM	2120	D P	D007
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16.	energency a	the contents of this consi	anment are fully	3°	31-4	ibed above b	y proper shippli Jing to applicat
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In case of a spiritual the tridiana Office of Environmental Response at 31/1/241-National Response Center at 800/424-8802 or 202/426-2675.

20

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19

Primed/Typed Name Sign

Signature

Late Late



In case of a spiling in minimum of control of 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT P.O. Box 7035 Indianapolis, IN 46207-7035

UNIFORM HAZARDOUS WASTE MANIFEST  (Form georgined to: 1. Generator's 1. Generator's 1. IMD0051:		Manifest A	1	not re	ation in the	039. Expire: the shedea by Federal II and K are req	O-T-
3. Generalor's Name and Mailing Address	/4334	AAAA5		Of State Manitest De			
E. I. du Pont de Nescrers s	Co., Inc.			INIA DO	100	74	
5215 Kennedy Avenue				INA UD	*30		
GARE, Chicago, 18 46312 (2)	19) 391-4600			i. State Generatorie - Someticken (1831 / 18			
. Transporter 1 Company Name	, 6. US EPA ID Number			. State Transporter			
Matlack Systems Inc.	DED98111016	6	.   [	), Transponeria Pho	meg	00-43	3-1
. Transporter 2 Company Name	. US EPA ID Number		4	State-Transporter	3/D1 .	per and the	
				.Transporter's-Pho	M 47.11.	e militage a	
Designated Facility Name and Site Address  ENVIRORAGE SERVICES OF Ohio	10. US EPA ID Number			Biate Facility's ID		9: "	43.0
876 Otter Creek Road	) 1.EE.		-	Lipunta De Albert		1.AV	
Oregon, OR 43616-7571	OED04524370	<b>6</b>	-   "	1. Feeliny's Phone -		, )	
	Amma 25421A	12. Conte					
. US DOT Description (Including Proper Shipping Name, Haz	ard Class, and ID Number)	No.	Type	Total Quantity	Total Wt/Vol.	Waste	No.
Furnace Flue Dust		- NO.		Cooling	170 701.	-	—
Hazardous Waste Solid NOS !	MA3077 PG3	36	DM	21800	P	D067	ς:
		310	ران ۲	0/ Sam	دیر ع	OLIX TO	1
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Additional Descriptions for Materials Signal Aboys Total College		****	स्टाप्टर	ndling Codes socy		Market many	200
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		PLOST DETA	Niest.	Afile Canen	Briston.	MALE SE	
Special Handling Instructions and Additional Information	<u> </u>	<u> </u>					
•	•			-			
	<b>V</b> .	•	-		••		
GENERATOR'S CERTIFICATION: I hereby declare that the name and are elaselfied, packed, marked, and labeled, a	e contents of this consigning	nent are fully	and ac	curately described	sbove b	y proper shi	iopir
international and national government regulations.	ida ata iu mii taabacta ii bi	oper conditio	n tor t	telembour by uighter	A RECOL	mud ra ebbi	ICEL
If I am a large quentity generator, I certify that I have a p	program in place to reduce	the volume s	nd tox	icity of waste gene	rated to	the degree	I ha
determined to be economically practicable and that I have me which multiples the present and future threat to had	ye selected the presticable wan haalth and the environ	method of tri ment: OR, if i	emie Ama	nt, storage, or disp Imali guantity beni	iossi gur instor, i i	tently avalla have made s	I DIE
faith attort to minimize my weets generation and select	the best waste managemen	n method the	is av	silable to me and t	hat I car	anord.	
Printed/Typed Name	Signature				- IA	Honto Day	
A STATE OF THE STA						<u></u>	
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Printed/Typed Name	Signature				ja	Vale Monin Day	1 Y
·/							
-Transporter 2 Acknowledgement of Receipt of Materials						Date	
Primed/Typed Name	Signature	No	4 1	FAX Ha 9/27/93	n 1	Month Day	
Discrepancy Indication Space			• •	C :	للسل	-	_ـــ
Discrepancy Indication Space				YAX HU	nsmil	to Co	
				9/21/03	باد	fe	,
•		•		N L (17)	6,	•	
. Facility Owner or Operator Certification of receipt of hazari	goue majerials covered by th	na manifest ex	0901 8	s noted Item 19.			
Printed/Typed Name	Signature					Month Day	

Attachment @

### TELEPHONE CALL REPORT

Time 8:00+m - 9+h Date 4 /29 /94 From: Rich Landebush To: O.J. Meyer free Mgr Duront - Exist Eticage EMI - TOEM Subject Discussed follow pto 4/28/04 msp 12: questions about Ludon flue dust. I had questions relating to the generation of the flux dus Specifically I asked about the initial start of furnage clean ort which generated 71 drims of 1007 waste shipped in 1993, its staled the huncice was "Tebuilt" in June of 1991 which generated 71 dram of waste OJ stated they thought the drome in the dust and B. were (brone +3 (trivalent chrome) and there for NOW harards. The Basis for for this determination was made by " Ordia statement from the mainfactives starting the bricks in neight from trivalient chrome the test the wester. OI state.

Details he took a grob sample, had attested and determined it combines the maintains the starting the sample of the start of the start of the start of the sample of the start of the start of the sample of the start of the start of the sample of the start of the start of the start of the sample of the start of heravallet chrone" in the waste. He consulted his consult who saggested they do a "representative" somple. In march (31 a TCLP on a rep. sumple showed the wester failed the test for poor weste w Chrone. In September (9/27/94) two loads of. r disposal. supped off - site . test results, dot 16 1943 I Asked OJ to FL of the weste 1993 test redults 1 1986 Wher gov Supped in 9/93, Al: Clase dust to approved by subort co ong with wes a defeat facility in inested a copy thereterization of the y Dufonts' response erchy flos 1554

Pile in County

Action: After reviewing the continuous of call with conclusion of 290 day storage of Door weste out the Fair lity, Recomend closure of storage area.

State Form 4177 SBE61-075 Back Condition

A Hachment (1)

### TELEPHONE CALL REPORT

Date	14 194	1	Time_	3:30pm		
From:	RICK (	Pondeb-51	To:	0.3.	Meyer	·
	ID	em		Duf	Pont	
Subject	Discussed	FAX c	, (0)	nies ch	TCLPS	frem
Summary	•	FAXc	c (1	eAmont	fe-by.1	d.

# Action Required

Decails

I asked OT to FAX (asAp) copies

of 1992 test of waste (rebuild) refractory

brick generated in 1991. and the results

of Merch 1993 TCLPIS

of Also Asked hum to send any other

results from testing the material

File in County\_\_\_\_

# PREINSPECTION FILES AUDIT CHECKLIST

	DATE: 4 26 94
	BY: PO
COMPANY: Du Pont	
LOCATION: E. Chicago	
I.D.#: IND/005/174/354	
Type of Inspection: G-T-TSDClosure-Complaint-Oth	ner (Please specify)
A. <u>GENERAL</u>	
	YES NO NI
<ol> <li>Federal Notification on File</li> <li>Federal Part A on File</li> <li>Closure Plan Reviewed</li> <li>Contingency Plan Reviewed</li> <li>Biennial Report Reviewed</li> <li>Part B Permit Reviewed         <ul> <li>(Note any Special Permit Conditions)</li> </ul> </li> </ol>	
B. <u>NOTIFICATION DATA</u> (Notify type, waste codes list  Notifica as LQG / Storage & there	
1980 pothication showers fool & post	2 in contemers
(1005 pool \$ pool in fames	
C. LAND DISPOSAL INFORMATION	•
1. List Waste and Land Disposal Facility	i
	<del>-</del> ;
	<del>-</del>
Revised 7/14/93 (1) Preinspection Checklist	— Page

D.	LIST POSSIBLE WASTE STREAMS NOT LISTED ON BIENNLAL REPOR
E.	LIST WASTE MANAGEMENT PRACTICES WHICH MAY REQUIRE PERMIT
F.	FEDERAL PART A (Handling Codes), OR PART B PERMIT
	Code Amoun: Unit of Measure
	1.
	2.
	3
•	5
G.	CLOSURE/POST-CLOSURE
	1. Are there any closed units? If yes, describe.
Н.	COMPLIANCE BRANCH
	List past two inspections and enforcement actions (CO, NOV, VL, WL)
	Date of Inspection Action Type Date of Action
Rev	vised 7/14/93 (2) Preinspection Checklist Page

I.	LIST UNRESOLVED ENFOR	CEMENT A	CTIONS/VIOL	ATIONS	
J.	BRIEFLY SUMMARIZE PRE	VIOUS VIOI	LATIONS. (No	te if they are r	epeq(s)
K.	LIST ANY ITEMS UNDER CONTROL OF NEITH MINIMIZATION REQUIRES SETTLEMENT AGREEMENT	ED FIELD MENTS IN	VERIFIED, I	NCLUDING V	VASTE
L.	COMMENTS				
Rev	rised 7/14/93 (3) Pre	inspection C	perklist	Page	

# DESCRIPTION OF VIOLATIONS E.I. DuPont DeNemours & Company IND 005 174 354 INSPECTION OF April 28, 1994

- 1. Page #6 40 CFR 268.50(c)

  The facility stored hazardous waste for greater than one year. (See additional comments, page #6 and attached trip report)
- 2. Page #20 40 CFR 262.34

  The facility accumulated and stored hazardous waste on-site for greater than 90 days. (See additional comments, page #6 and attached trip report)

Je 181



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

January 29, 1988

## VIA CERTIFIED MAIL

P 395 651 792

Mr. O. J. Meyer
E.I. DuPont DeNemours and Company, (Inc.)
5215 Kennedy Avenue
East Chicago, Indiana 46312

Re: RCRA Scheduled Generator Inspection IND 005174354

Dear Mr. Meyer:

The Indiana Department of Environmental Management (IDEM) is the State agency authorized by the U.S. Environmental Protection Agency, Region V (U.S. EPA), to carry out the provisions of the Resource Conservation and Recovery Act (RCRA), Public Law 94-580. Under this authority and the provisions of the Environmental Management Act (Indiana Code 13-7), the IDEM is obligated to conduct inspections of facilities engaged in the handling of hazardous waste to determine compliance with RCRA and Indiana's Hazardous Waste Rules 320 IAC 4.1.

On October 6, 1987, an inspection of E.I. DuPont DeNemours and Company, (Inc.), located at 5215 Kennedy Avenue, East Chicago, Indiana, was conducted by Mr. Ted Warner of the Department's Office of Solid and Hazardous Waste Management.

Based on the information gathered during the inspection, it appears that your company generates less than 220 pounds per month of hazardous waste (less than 2.2 pounds of acute hazardous waste). Therefore, your company is classified as a conditionally exempt small quantity generator. Our office will assume that you agree with this determination unless you inform us otherwise in writing. As a conditionally exempt small quantity generator, you are subject to the minimal requirements specified in 40 CFR 261.5 and 320 IAC 4.1-3-5. Based on this inspection, your company was found to be in compliance with these requirements.

Mr. O. J. Meyer Page 2 January 29, 1988

If you have any questions, please contact Mr. Ted Warner at AC 317/232-4303. Your cooperation and efforts will be appreciated.

Very truly yours,

James M. Hunt, Chief Compliance Monitoring Section Hazardous Waste Management Branch Solid and Hazardous Waste Management

trul. Il com

TFW/mfw

cc: Lake County Health Department

Du Port E. I. De Memoure & Co
Facility
Ted Warner 7/9/87 AM
Photographer Days Time



Subject (movement):
Possible contamination!

SF 39674

Dept. of Environmental Mgmt.



State Form 4336

#### TOF ENVIRONMENTAL. ANAGEMENT DEPARTML



#### **INDIANAPOLIS**

OFFICE MEMORANDUM

DATE:

October 29,1987

TO:

Du Pont EI De Nemours & Company RCRA File IND 005174354, East Chicago, Lake County

THRU:

Dave Berrey () ()

FROM:

Ted F. Warner TW

Compliance Monitoring Section

SUBJECT: Trip Report for the Scheduled Generator

October 6, 1987 Inspection of

My pre-inspection file audit did not provide any significant information. The facility had not been inspected by any representatives of ISBH or IDEM. The facility was inspected by EPA in 1980 with no documentation of enforcement action. The files indicate that Du Pont generated "F" solvent and ignitable waste streams. My inspection revealed that Du Pont is operating as a small quantity generator. The only waste they are generating as of November 1986 is DOOL waste, which is recylced by Safety Kleen Corporation under a contractual agreement. In November 1986, Du Pont discontinued their agricultural chemical production, which generated "F" solvent waste.

No violations were noted during my visit on October 6, 1987; therefore, I will prepare a letter of compliance.

TFW/mfw

cc: Enforcement Section

1B/

# RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS TREATMENT, STORAGE, AND DISPOSAL FACILITIES Form 1 - General Facility Standards

# I. General Information:

(A)	Facility Name: Z. I. Du Pont de Nemauro Que Co.
(3)	Street: 5215 Kennely anene
	City: East Chicago (d) State: Inline (E) Zip Code: 46
(F)	Phone: (2/9) 398-2048 (G) County: Lake
(H)	Operator: E. I. Du Pont de Nemaur 2nd Cr.
(1.)	Street: 5215 Kennely anenue
(J)	City: <u>East Clecago</u> (IN State: <u>Inline</u> (L) Zip Code: <u>46</u> .
	Phone: (219) 398-2040 (N) County: Lake
(0)	Owner: E. I. Du Pont de Meneure Re Co.
(P)	Street: 1008 Market St.
(0)	City: Wilmington (R) State: Doleware (S) Zip Code: 198
(T)	Phone:(U) County:
	Federal Municipal Y Private
(V)	Type of Ownership: State County
1 ' /	Type of officers.
(W)	Date of Inspection: $12/9/80$ (Q) Time of Inspection (From) (To)
	Weather Conditions: Rain plan
(1)	

Inspection Participants	Title		Telephone :
Eugene Meyer	Chemiet		886-614
	<u> </u>		
		;	
11. D	escription of Site Activ	: ity	
,			•
; X Generator (Form 2)	(B)	Transporter	(Form 3)
Chemical, Physical		50 a mai 150 m	- 51
and Biological Treatme		Storage (Form	
Landfill (Form 6)		Incineration Thermal Treat	
) Land Treatment (Form 4	/ \\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		iment (rorm /)
) Comments: Jacility u	ill disone of	wastes u	ithin 90
days	<u> </u>		·
Supplemental forms (Listed i	n Parathesis   must be co	moleted for each	. activity
Supplemental forms (Listed i inspected. Attach all Suppl	n Parathesis) must be co emental forms to this re	mpleted for each	n activity.
Supplemental forms (Listed i inspected. Attach all Suppl	n Parathesis) must be co emental forms to this re Yes No	mpleted for each	n activity. See Remark

	•		Yes	b,	Not Inspected	See I Numbe
		the Regional Administrator n notified regarding:				!
	1.	Receipt of hazardous waste from a foreign source?	·	<u>X</u>	•	
	2.	Transfer of Ownership?		<u>X</u>	·	***************************************
)	Gen	eral Waste Analysis:				
	1.	Has the owner operator obtained a detailed chemical and physical analysis of the waste?	<u>X</u>			****
	2.	Does the owner operator have a detailed waste analysis plan on file at the facility?		·.		
	3. .·	Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?			X	
(	Sec	urity - Do security measures include:				
	2.	Artificial or Natural Barrier Around Facility?	X_			-
	3.	Controlled Entry?	<u>X</u>			-
		Danger Sign(s) at Entrance?	X			
	Do Inc	Owner Operator Inspections lude:			•	
	1.	Records of Malfunctions?		·.		
	2.	Records of Operator Error?				····
	3.	Records of Discharges?	X		•	
	4.	Inspection Schedule?				
	5.	Safety, Emergency Equipment?				
	5	Security Devices?				
		Operating and Structural Devices?				
	8.	Inspection Log?	- 1			

•		Yes	No	Not Inspected	See Remar! Number
(E)	Do Personnel Training Records Include:				
	1. Job Titles?	<u>X</u>			
	2. Description of Training?	<u>X</u>			··
	3. Records of Training?	<u> </u>			
	Is Personnel Training Completed within the Required Time Frame?	<u>X</u>			
.(F)	Are the Following Special Requirements for Ignitable, Reactive, or Incompatible Wastes Addressed?			÷	
	l. Special Handling?	<u>X</u>			
	2. No Smoking Signs?	X			-
	3. Separation and Confinement?	<u>X</u>			· · · · · · · · · · · · · · · · · · ·
	IV. PREPAREDN	ESS AND I	PREVENTION		
(A)	Maintenance and Operation of Facility:				
	1. Is there any evidence of fire Explosion, or release of hazardous waste or hazardous waste constituent?	,	X		
(B)	Does the Facility have the Following Equipment:			· ·	
	1. Alarm System?	<u>X</u>			
	2. Telephone or 2-Way Radios?	X			
	3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	X			·
	Indicate the volume of water and	/or foam	available for	fire control:	
	Units: 250,000 ga	<u></u>			

, ,	•. '		Yes	No	Not Inspected	See Rem. Number
)	Tes:	ting and Maintenance of rgency Equipment:				
	1.	Has the Owner or Operator established Testing and Maintenance Procedures for Emergency Equipment?	<u>X</u>			
	2.	Is Emergency Equipment Maintained in Operable Conditions?	<u>X</u>			
)	המח [	Owner Operator Provided ediate Access to Internal rms (if needed)?	<u> </u>			
)		there Adequate Aisle Space Unobstructed Movement?	<u>. X</u>	·.		
7)	λψt	Arrangements with Local horities Included in Operating Record?	<u> </u>			
		VI. CONTINGENCY PLAN AND	) EMERGENCY	PROCEDURE	<u>2</u>	
		·				
	Fol	s the Contingency Plan Contain the lowing Information:  The actions facility personnel must take to comply with §264.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill	) EMERGENCY	PROCEDURE	<u>2</u>	
	Fol	s the Contingency Plan Contain the lowing Information:  The actions facility personnel must take to comply with §264.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous	EMERGENCY	PROCEDURE	<u>s</u>	

			Yes	No	Not Inspected	See Num
	3.	Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?				
	4.	A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?	X			
	5.	An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes:)	<u> </u>			•
(B)	Ava:	copies of Contingency Plan ilable at Site and local Emergency anizations?	<u>\                                    </u>			
(C)	Emer	rgency Coordinator				
•	1.	Is the facility Emergency Coordinator identified?	X	·		
	2.	Is Coordinator Familiar with all aspects of site operation and emergency procedures?	_X_			
	3.	Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	<u>\</u>		<u></u>	
[D)	Emer	rgency Procedures				
	at t Coor	en Emergency Situation has occurred this facility; has the Emergency dinator followed the Emergency tedures listed in 256.56?	_X_			· .

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# VII. MANIFEST SYSTEM, RECORDREEPING, AND FEFTETING

	Yes	МО	Not Inspected	See Rema Number
Use of Manifest System				
Does the facility follow the procedures listed in §265.71 for processing each Manifest?	X			-
2. Are records of past shipments retained for 3 years?	<u>X</u>			• • • .
Does the owner or operator meet requirements regarding Manifest Discrepancies?	<u> </u>			
Operating Record			•	
Does the facility maintain an operating record at the site as equired in §265.73?	<u>X</u>			
Availability, Retention and Disposition of Records		÷		
Are all records available at the site for inspection as equired in §265.74?	<u>\lambda</u>			
VIII. CLOSURE	AND POST (	CLOSURE		
Closure and Post Closure	n.A	a	0.0.	
Closure Plan Available for Inspection by May 19, 1981?	<del></del>	20		
2. Has this plan been submitted to the Regional Administrator?		<u>.</u>		
3. Has Closure begun?		<del></del>		<u>.</u>
4. Is closure cost estimate available by May 19, 1981?		٠.		
Post Closure Care and Use of Property - Has the Owner, Operator supplied a Post Closure Monitoring Plan (by May 19, 1981)?				~
	1. Does the facility follow the procedures listed in §265.71 for processing each Manifest?  2. Are records of past shipments retained for 3 years?  Does the owner or operator meet requirements regarding Manifest Discrepancies?  Operating Record  Does the facility maintain an operating record at the site as quired in §265.73?  Availability, Retention and Disposition of Records  Are all records available at the site for inspection as equired in §265.74?  VIII. CLOSURE 1  Closure and Post Closure  1 Closure Plan Available for Inspection by May 19, 1981?  2. Has this plan been submitted to the Regional Administrator?  3. Has Closure begun?  4. Is closure cost estimate available by May 19, 1981?  Post Closure Care and Use of Property Has the Owner Operator supplied a Post Closure Monitoring Plan	1. Does the facility follow the procedures listed in \$265.71 for processing each Manifest?  2. Are records of past shipments retained for 3 years?  Does the owner or operator meet requirements regarding Manifest Discrepancies?  Operating Record  Does the facility maintain an operating record at the site as equired in \$265.73?  Availability, Retention and Disposition of Records  Are all records available at the site for inspection as equired in \$265.74?  VIII. CLOSURE AND POST (Closure and Post Closure submitted to the Regional Administrator?  3. Has Closure begun?  4. Is closure cost estimate available by May 19, 1981?  Post Closure Care and Use of Property Has the Owner Operator supplied a Post Closure Monitoring Plan	1. Does the facility follow the procedures listed in §265.71 for processing each Manifest?  2. Are records of pest shipments retained for 3 years?  Does the owner or operator meet requirements regarding Manifest Discrepancies?  Operating Record  Does the facility maintain an operating record at the site as quired in §265.73?  Availability, Retention and Disposition of Records  Are all records available at the site for inspection as equired in §265.74?  VIII. CLOSURE AND POST CLOSURE  Closure and Post Closure  1 Closure Plan Available for inspection by May 19, 1981?  2. Has this plan been submitted to the Regional Administrator?  3. Has Closure begun?  4. Is closure cost estimate available by May 19, 1981?  Post Closure Care and Use of Property Has the Owner Operator supplied a Post Closure Monitoring Plan	Use of Manifest System  1. Does the facility follow the procedures listed in §265.71 for processing each Manifest?  2. Are records of past shipments retained for 3 years?  Does the owner or operator meet requirements regarding Manifest Discrepancies?  Operating Record  Does the facility maintain an operating record at the site as quired in §265.73?  Availability, Retention and Disposition of Records  Are all records available at the site for inspection as equired in §265.74?  VIII. CLOSURE AND POST CLOSURE  Closure and Post Closure  1 Closure Plan Available for inspection by May 19, 1981?  2. Has this plan been submitted to the Regional Administrator?  3. Has Closure cost estimate available by May 19, 1981?  Post Closure Care and Use of Property Has the Owner, Operator supplied a Post Closure Monitoring Plan  Post Closure Care and Use of Property  - Has the Owner, Operator supplied a Post Closure Monitoring Plan



## RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS Form 2 - Generator Inspection

# I. General Information:

(A) Installatio	on Name: _ 乏	I. Du Pa	nt de Ne	mourd	and Co.	
(B) Street:	5215 Ke	mely a	nenue			
(C) City:	ant Chica	(D) Sta	te: And	iena	_(E) Zip Code:	463,
	9) 398-201	<b>/</b>		4	•	
	,					
(H) Operator: _	_ Same				••	
(I) Street:			· · · · · · · · · · · · · · · · · · ·			
(J) City:		(K) Sta	te:		_(L) Zip Code:	
(M) Phone:		(N)	County:	·	·	<del></del>
		· · · · · · · · · · · · · · · · · · ·	- <del>-</del>			
	E. I. Dai	,		) and (	5.	
	1008 Ms					
•	Silmington				_(S) Zip Code:	198
(T) Phone:	· · · · · · · · · · · · · · · · · · ·	(U)	County:	•	····	
		Federal	Mı	unicipal	X Private	2
(V) Type of Ow	nership:	State	C	ounty		
(W) Date of In	spection: $12/9$	/80 Tin	ne of Inspect	ion (From) _ ‹	2:30 (To)	3:00
(X) Weather Co	nditions: $\mathcal{K}$	ain, ple	P			<b>D</b> -
	•				•	_

(Y) Pers	son(s) Interviewed	Title	Telephone
Q	ack Sixmith	Industrialchem	ut(219)398-20.
	onald V. Luebke	Plantmenger	
	pection Participants Eugene Meyer	Title Clement	Telephone 886-61.47
<del></del>			* * * * * * * * * * * * * * * * * * * *
•	II. OTHER TYPE	OF HAZARDOUS WASTE ACTIVITY	
· (A)	Transporter (Form 3)	(B) Chemical, Biologica	Physical and 1 Treatment (Form 4)
(c) _	Storage (Form 5)	(D) Landfill	(Form 6.)
·.	Incineration (Form 7)	(F) Thormal I	restment (Form 7)
(G) Co	omments:		•
, ,			
:			
<del></del>			
. —			

Supplemental forms (Listed in Parathesis) must be completed for each activity inspected. Attach all Supplemental forms to this report.

				^	-·
	111	. MANIFEST			•
		Yes	No	Not Inspected	See Ma Number
	Are copies of the Manifest available?  Ones the Manifest contain the following information:	<u>X</u>		· · · · · · · · · · · · · · · · · · ·	
	following information:  1. Manifest document number?	X			
	Name, mailing address, telephone number, and EPA ID Number of Generator?	<u></u>			
	3. Name and EPA ID Number of Transporter(s)?	<u> </u>		· · · · · · · · · · · · · · · · · · ·	
	4. Name, Address, and EPA ID Number of Designated permitted facility and alternate facility?	X			
	5. The description of the waste(s) (DOT shipping name, DOT hazard cl DOT identification number)?	ass, X	-		
	6. The total quantity of waste(s) are the type_and number of containers loaded?		-		
<b>-</b>	7. Required Certification?	<u> </u>	ي ٠٠ -		
	8. Required Signatures?	<u> </u>			·
(C)	Does the Owner or Operator Submit Exception Reports when Needed?				
		·		•	
	IV. PRE-TRAI	SPORT REQUIRE	MENTS		
(A)	Is Generator Packaging waste in accordance with DOT Regulations?	<u> </u>	:		
(B)	Are waste packages marked and labeled in accordance with DOT Regulations concerning hazardous waste materials	V	·		
(C)	If required, are placards available to transporter?	X			

.

	· · · · · · · · · · · · · · · · · · ·	•	·		·	
			Yes	No	Not Inspected	See Rema Number
(D)	Pre	-shipment Accumulation:				
	١.	Are containers marked with start of accumulation date?	X			
	2.	Are the containers of hazardous waste removed from installation before they can accumulate for more than 90 days?				
	3.	Are wastes stored in containers managed in accordance with 40 CFR Part 265.174 and 265.176 (weekly inspections of containers, container holding ignitable or reactive wastes located at least 15 meters (50 Feet) from facility's property line?	,			
•	4.	Are wastes stored in tanks managed according to the following:				
		a. Are tanks used to store only thos wastes which will not cause corrosic leakage or premature failure of the tank?		Dog &	e	·
مب مب		b. Do uncovered tanks have at least of the (2 feet) of freeboard, or dise or other containment structures?	:s			
		c. Do continuous feed systems have a waste-feed cutoff?		-		
		d. Are required daily and weekly inspections done?		· · · · · · · · · · · · · · · · · · ·		
		e. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requi em nts?	<u>-</u>		;	
	·	f. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR §265.17(b) apply)		·		

				Inspected	Humber
(	5.	if hazardous waste ccumulate on site, does the generator follow the tollowing general facility standards?	111		
Α.		Personnel training records  If General Facilia  Il General Facilia	tr. Is also a	TSD;	omit sec
	1.	Job Titles?			. * <u>-</u> -
	2.	Description of Training?			
•	3.	Records of Training?			
		Is Personnel Training Completed within the Requried Time Frame?			
. B.	Pre	epardness and Prevention			
	1.	Maintenance and Operation of Facility:			
	•	a. Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		· ·	
	2.	Does the Facility have the following equipment?			
•		a. Alarm system?			
. <del>-</del> .		And the first of peak of the profession of the first of the profession of the first	رون نوی <u>ده</u> د <del>وی ده</del>	·	
		c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?			
		Indicate the volume of water and/or foam avail	lable for fire	control	
		Units:			
	3.	Testing and Maintenance of Emergency Equipment:	_		
•		<ul> <li>a. Has the Owner or Operator         established testing and         Maintenance Procedures         for Emergency Equipment</li> </ul>			
		b. Is emergency equipment Maintained in Operable Condition?			

•		· Yes	No	Not Inspected	See Remar: Number
4.	Has Owner/Operator Provided Immediate Access to Internal Alarms (if needed)?			,	
5.	Is there adequate Aisle Space for unobstructed Movement?				, % <del>-</del>
6.	Are arrangements with local authorities included in the operating record?	· ·			
	ontingency Plan and Emergency rocedure .				
1.	Does the contingency plan contain the following:				
•	a. The actions facility personnmust take to comply with §264.51 and 261.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If owner has a Spill Prevention, Co	the			•.
	and Countermeasures (SPCC) Plan, only to amend that plan to incor hazardous waste management proviethat are sufficient to comply withe requirements of this Part)	porate sions			• •
	b. Arrangements agreed to by lo police departments, fire departments hospitals, contractors, and Stat local emergency response teams to 6264.37?	ents, e and o			
	c. Names, addresses, and Phone numbers (office and Home) of all persons qualified to act as emer coordinator.	gency			
·	d. A list of all emergency equipment at the facility which the location and physical descriof each item on the list, and a outline of its capabilities?	ption	· · · · · · · · · · · · · · · · · · ·		
	e. An evacuation plan for facil personnel where there is a possi that evacuation could be necessa (This plan must describe signal (to be used to begin evacuation, evacuation routes and alternate evacuation routes.	bility ry?			
-					

	•	Yes	No	Not Inspected	See <u>Re</u> ma Num
2.	Are copies of the Contingency Plan available at site and local Emergency Organizations?			·	
3.	Emergency Coordinator				, 1, 4
	a. Is the Facility Emergency Coordinator Identified?			7.4	
	b. Is Coordinator Familiar with all aspects of site operation and Emergency Procedures?		**************************************		•
٠.	c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?			· · · · · · · · · · · · · · · · · · ·	<del></del>
4.	Emergency Procedures				
. ·	If an Emergency Situation has occurred at this facility; has the Emergency Coordinator followed the Emergency Procedures listed in §256.56?				
		<u> CUBUKEEB.</u>	······································		
E R	re Manifests, Annual Reports, eception Reports, and All Test esults and Analyses Retained for the least three years?				
	VII. INTERNA	ATIONAL SE	HIPMENTS	· .	
	es the Installation Imported or kported Hazardous Waste?		X	<u> </u>	
	(If A was answered Yes, then comp	olete one	or both of	the following)	
1.	Exporting Hazardous waste, has a generator:				
•	a. Notified the Administrator in writing?				
	<ul> <li>Obtained the Signature of the foreign consignee confirming delivery of the waste(s) in the</li> </ul>				

	. 162		Inspected	Number
c. Met the Manifest requirements	5?	<del></del>		
<ol> <li>Importing Hazardous Waste, has the generator:</li> </ol>				
a. Met the manifest requirements	s?			
VII <b>L</b>	PREPARER INFOR	MOITAM		
Name: Eugene Meyer				·
Title: Classic O			<u>.</u>	
Pnone Number: 886-6147				
		<i>.</i> .		
REMARKS:				
	<del></del>	<u> </u>		
	<u> </u>			
<del></del>		<del></del>		· · · · · · · · · · · · · · · · · · ·
		•		

### — HAZARDOUS WASTE — HAZARDOUS WASTE

# BILL OF LADING/HAZARDOUS WASTE MANIFEST ORIGINAL—NOT NEGOTIABLE FROM E. I. DU PONT DE NEMOURS & COMPANY, A CORPORATION

This is to certify acceptance of the hazardous waste for treatment, storage

	_	NAME	OF CARRIER	· (SC	AC)	(	CARRIER NU	MBER
			IDENTIFICATION				····	
	1	COMPANY I	IAME, MAILING ADDRESS, AND TE	EPHONE NUMBER		12 DIGIT EF	A ID#	DATE SHIPPED
GENERATOR/ SHIPPER		E. I. DU PONT D CHEMICALS & PI EAST CHICAGO,	E NEMOURS & CO. 6 GMENTS DEPT 521 IN 46312		98-2040	IND005	174354	OR RECEIVED
RANSPORTER #	•					. <u>.                                   </u>		
RANSPORTER # :	2	<del></del>						
SDF TREATMENT TORAGE OR DIS- OSAL FACILITY 1	+	-					· · · · · · · · · · · · · · · · · · ·	
SDF TREATMENT TORAGE OR DIS- OSAL FACILITY 2	(2	LTERNATE)						
			WASTE IN	FORMATION				
NO. AND TYPE PKGS.	нм	DE: (Hazardous Waste Shipp	SCRIPTION AND CLASSIFICATION ang Name per 49 CFR, Hazard Class,	and UN or NA No.)	SHIPPER	EPA 'S HAZ, WASTE	PACKAGE WT/VOL	TOTAL WT./VOL
SPECIAL INS	TRU	CTIONS						FMIS BOX SOME
Continue	ĮU.S	A. Excluding West: D.C. (483-7516 - Outside Confine	ELECTROS LIBEROS ACCIDENTS 800) 424-9300* (TULL FREE) 801) 424-9300* (TULL FREE)		NDERED No 🗆	OR APPLIE	D	PREPAIL  Yes N
shippers are require the agreed or decla The agreed or de	ed to si red va eciared	is dependent on value, tate specifically in writing the property. I value of the property is by the snipper to be not	If the shipment moves by a carrier by water, the the bill of lading shall s "carner's or shipper's well	law requires that tate whether it is	this ships on the co The ca	ment is to be delive onsignor, the consi	ered to the cons phor shall sign the e delivery of this	policable bill of ladir ignee without recoi ie following stateme is shipment without i
	per		Signature			(Signa	ture of Consign	or)
of Lading, the proc condition of conte above which said of any person or corp usual place of deliv	erty di nts of arrier loratio	escribed above in apparent good packages unknown), marked, c (the word carrier being understoo n in possession of the property or sain destination, if on its roule, of	ffect on the date of the issue of this Bill order, except as noted (contents and onsigned, and destined as indicated d throughout this contract as meaning der the contract) agrees to carry to its herwise to deliver to another carrier on chicarrier of all or any of, said property	over all or any portion of or any said property, the lading terms and conditions of the said shipper hereby certing governing classification and accepted for hims.	at every service tions in the govi lies that he is fail n and the said to	to be performed his erning classification miliar with all the c erms and condition	ereunder snall b on on the date o hilt of lading tern	e subject to all the c if shipment. is and conditions if
			CERT	IFICATION		hazardoue w	ete chiomes	
described, pag	ckage	ed, marked and labeled, ar	rials are properly classified. and are in proper condition for gulations of the Department	This is to certify accep		nazaruous wa	iale ampiner	DATE
of Transportat	ion a	ind the EPA	/1	TRANSPORTER 1 SIGNATU	RE.			UNIE
			51	TRANSPORTER 2 SIGNATU	RF.			DATE

or disposal.

003

E. I. du Pont de Nemours & Company, Shipper

### GENERATOR PRE-INSPECTION CHECKLIST

		DATE:_	9-3	<u> 0-8</u>	7
	any: Du Pont E I De Memours & Co tion: 5215 Kennedy ave.	<u>.                                    </u>	SD (	G	T
Type	ID Number: 1NB 805 174 354 of Industry: agricultural Chancel ector(s): Ted Warner	»			
1.	Annual Report Reviewed:	YES	NO		
2.	Date of Last Inspection: [8]4 8f) Enforcement Action Taken in Past:				
4.	List Type of Action and Major Violations:  none by IDEM				
5.	Approval Letters for Landfilling ALL Waste Reviewed. List Waste, Amount, and Landfill Approved:	NA			
-	mone in Indiana				
6.	NPDES Permit: 002 4003	<u> </u>			
7.	List Possible Waste Streams Not Listed on Annual	Report:			
	none				

8. List Possible Waste Practices Which May Require a Permit:

landbill

## SMALL QUANTITY GENERATOR Generator RCRA Inspection Report 100 - 1000 kg

EPA Identification Number: / /	<u> </u>	4354
Installation Name: Du Pont	EI De Memouro 4 Co.	· · · · · · · · · · · · · · · · · · ·
Location Address: 525 Ker	medy avenue	
city: East Chicago		zip: <u>463/2</u>
Date of Inspection Oct. 6	1987 Time of Inspection	9;30A
Person(s) Interviewed*	Title	Telephone
O. J. Muser	Sen. Supervisor	219-977-85
Inspector(s)	Agency	Telephone
Ted Warner	IDEM	317-232-4303
	· · · · · · · · · · · · · · · · · · ·	
Does this facility have any proce Part A permit application? If so description below:		
No		
	· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·	
·	• • • • • • • • • • • • • • • • • • • •	
	• • • • • • • • • • • • • • • • • • • •	
• • • • • • • • • • • • • • • • • • • •		

	IND 005 179	, 50,	<del></del>
2. Type of Facility based	on inspection	Q 6 (Cond	exapt.)
<ol> <li>Type of Operation, Prod Operation. Concentrate non-hazardous).</li> </ol>	lucts Manufactured, P on processes that p	rocesses Utilized roduce waste (ha	d, Size of zardous or
This Jaco	lity is opera	ting only	the
rodeun silicate	plant at	this time	. The
agricultural chem		_	
November of 1986		/	
generated is		//	•
the Sofety Kleen C			7/
11 /	,	<i>^</i> , <i>() 1</i>	
A conditionally of this form to die the 4. Hazardous waste	engt SOG. Y	went alien	lad.
4. Hazardous Waste Streams/EPA #	Source	Rate Aus	Disposition
D00/	Claning	,	Jafety Kleen
	- (Colored)	200	Jaguag Valen
		2 -1/	
· · · · · · · · · · · · · · · · · · ·		3 mlbo.	
		3 m lbo.	
		3 m lbo.	
			<del></del>
			<del></del>
			<del></del>
			<del></del>

On-Site	Amount	How Stored	Comments
Day	4-16 gal. st	lafety Kleen	Machine
	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	· · · · · · · · · · · · · · · · · · ·		
. List Transporters Use b	y the Company		
Laste to Klein	· · · · · · · · · · · · · · · · · · ·		
		· · · · · · · · · · · · · · · · · · ·	
		·	
Non-Hazardous Waste Streams Calcium Schote Hud	Source of Treatment	Rate	Disposition
(Neceum Jugota Acuae	J. Therman	XWN1	on-puc
Can the company document claimed?		e streams are non	-hazardous as
O. Note any non-RCRA viola pretreatment program, C		, dumping in city	
Mo	ne		
			· · ·

 $<sup>{}^{\</sup>star}$ If hazardous waste on-site exceeds 6,000 kilograms, the generator must comply with the requirements for large quantity generators.

10.	Additional Comments
1.7	

. . . . .

Ma	nifes	t Req	uirements:	Yes	No	NI
	1.	avai	the operator have copies of the manifest lable for review?  FR 262.40 (320 IAC 4.1-10-1)	<u> </u>	_	·
	2.	info info crit	he manifest forms examined contain the following rmation: (If possible, make copies of, or record rmation from, manifest(s) that do not contain the ical elements.) FR 262.20 (320 IAC 4.1-8-1)			
		a.	Manifest document number? (A sequential number for all manifests before September 20, 1984, and a five digit unique number after September 20, 1984.)		_	· —
		b.	Name, mailing address, telephone number, and EPA ID number of generator?	1	· · ·	
		c.	Name, telephone number, (4.1-14-3) and EPA ID number of transporter(s)?	<u> </u>	<del></del>	
		đ.	Name, address, telephone number (4.1-14-3) and EPA ID number of designated permitted facility?		· · · ·	
		e.	The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	<u>- V</u>	<u></u>	
		f.	The total quantity of waste(s) and the type and number of containers located?	<u>V</u>	<del></del>	· .
		g.	Required certification?	<u>/</u>	·	· · ·
		h.	Required signatures?	· 1/		
		i.	EPA hazardous waste number (4.1-14-3)	V	· .	
	Last	mar	rifeto for ag Chaned waste Nove	mbe	~ st	1986
				<del></del> -	· · · · V	<del></del>
	······				· · · ·	

<sup>\*</sup>Hazardous waste which is reclaimed under a contractural agreement meeting certain conditions specified in 262.20 (320 IAC 4.1-8-1) need not be manifested. If the generator claims such an exemption, complete the next section, Special Provisions for Waste Reclaimed Under Contractual Agreement.

Speciál 1	provisions for Waste Reclaimed Under		
	provisions for Waste Reclaimed Under ual Agreements	Yes No	NI
1.			· ·
2.	Is the frequency of shipments specified in the agreement?  40 CFR 262.20 (320 IAC 4.1-8-1)		
3.	Is the vehicle used to transport the waste to the recycling facility and deliver regenerated material back to the generator owned and operated by the reclaimer of the waste?  40 CFR 262.20 (320 IAC 4.1-8-1)	<u>~</u> _	
4.	Does the generator maintain copies of all reclamation agreements in his files for a period of at least three years after termination or expiration of agreement?  40 CFR 262.20 (320 TAC 4.1-8-1)		· 
Internat	ional Shipments:	N/A	
1.	Has the installation imported or exported hazardous wastes?  40 CFR 262.50 (320 TAC 4.1-11-1)  (If answered yes, complete the following as applicable a. Exporting hazardous waste; has a generator:	e)	
	1) Notified the administrator in writing?		
	Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country?	··· ··	
	3) Met the manifest requirements?	· · · · · · · · · · · · · · · · · · ·	
	b. Importing hazardous waste; has the generator met the manifest requirements?		
		·	
· .			
Record K	Keeping and Recording		
1.	Has the generator made a proper hazardous waste determination for all solid wastes generated at the facility?  40 CFR 262.11 (320 IAC 4.1-7-2)	<u>~</u> _	

2.	Are all test results and analyses needed for	_
	hazardous waste determinations retained for	
	at least three years? 40 CFR 262.40 (320 IAC 4.1-10-1)	
	40 CFR 202.40 (320 TAC 4.1-10-1)	
3.	Are weekly inspections of container accumulation	
	areas and daily and weekly inspections of tank	
	storage areas done at the facility?	
	40 CFR 262.34(a)(1) (320 IAC 4.1-9-5) referencing	
	265.174 (320 IAC 4.1-23-5) for containers and	
	265.194 (320 IAC 4.1-2-4 for tanks	
6.	Are these inspections documented?	
		•
		<del></del>
Personne	1 Training/Emergency Procedures	
responsi	raste handling and emergency procedures, relevant to the bilities during normal facility operations and emergence (62.34 (320 IAC 4.1-9-5)	
40 CFR 2	02:34 (320 Inc 4:1-3-3)	
1.	Describe the type of training program utilized by	
	the generator (on-the-job, formal classroom, outside	
	consultant, etc.)	-
·		
2		
2.	Is any written documentation of training kept by the generator? If so, briefly describe.	
	generator? If so, bilerry describe.	
		<del></del>
<del></del>		
3.	Is an emergency coordinator assigned and either on	
	call or on the premises at all times?	
	40 CFR 262.34 (320 IAC 4.1-9-5)	
4.	Is the name and telephone number of the emergency	•
	anardinator morted nove to the belowheren	
	coordinator posted next to the telephone? 40 CFR 262.34 (320 IAC 4.1-9-5)	· · · · · · · · · · · · · · · · · · ·

	Name		<u>Title</u>	<u>Phone</u>
	,			
6.		ne following in phone?	formation posted next to the	/
	a.	Location of fi	re extinguisher	<u> </u>
	b.	Location of sp	ill control material	<u></u>
	c.	Location of fi	re alarm, if present	<u> </u>
	d.	_	number of the fire department ility has a direct alarm	
Comments	:			
. :				
			• • • • • • • • • • • • • • • • • • • •	
:				
7.	faci desi	lity, has the e gnee followed t ified in 40 CFR	uation has occurred at this mergency coordinator or his the following emergency proced 262.34 (320 IAC 4.1-9-5)	
	a.	In the event o called or an a a fire extingu	of a fire, was the fire depart attempt made to extinguish it isher?	ment with
	b.		of a spill, was the flow of e contained to the extent	
	c.	Was the hazard materials or s practicable?	lous waste and any contaminate soil cleaned up as soon as	ed

			-9-	•
				NA
8.	T~ &1	20 046	ent of a fire, explosion, or other release w	hich could
0.	threa know: imme	aten h ledge diatel	numan health outside the facility or when the that a spill has reached surface water, the ly notify the National Response Center (usin number 1-800-424-8802).	e generator has generator must
	a.	this	the emergency to this extent occurred at facility?	
-,·	b.		the report to the National Response Center iowing information:	nclude the
		1)	The name, address, and U.S. EPA Identification number of the generator	
		2)	Date, time, and type of incident	· · · · · · · · ·
		3)	Quantity and type of hazardous waste involved in the incident	
		4)	Extent of injuries, if any	··· · · · · · · · · · · · · · · · · ·
		5)	Estimated quantity and disposition of recovered materials if any.	· ·
9.	of a	11 re	DEM Emergency Response Section notified leases which threatened or could have d human health or the environment outside ity?	
			· · · · · · · · · · · · · · · · · · ·	

### Preparedness and Prevention:

Part 265 Subpart C as required by 262.34 (320 IAC 4.1-9-5)

		<u>-</u> '		
1.	Main	tenance and Operation of Facility		
	a.	Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		
		40 CFR 265.31 (320 TAC 4.1-17-2)		112
2.	If r	equired, does the facility have the following equip	ment:	۱۲/
	a.	Internal communications or alarm systems? 40 CFR 265.32 & 265.34 (320 IAC 4.1-17-3 & 5)		
	c.	Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? 40 CFR 265.32 (320 IAC 4.1-17-3)	,	<del></del>
	<b>d.</b>	Are water hoses, foam equipment, automatic sprinkl or water spray equipment available? 40 CFR 265.32 (320 IAC 4.1-27-3)	lers	
	<del></del>			
		······································		
		······································		
			YES	NÓ NI
3.		ing and Maintenance Emergency pment:		
_	а.	Has the owner or operator established testing and		, ·
_		maintenance procedures for	/	
		emergency equipment? 40 CFR 265.33 (320 IAC 4.1-17-4)		<del></del>
	b.	Is emergency equipment	1/	<b>,</b>
	-	maintained in operable	V	
		condition?		· ·

4.	Has owner or operator provided immediate access to internal alarms? (If needed) (40 CFR 265.34 (320 IAC 4.1-17-5)	٧	_		
5.	Does the owner or operator maintain adequate aisle space for inspections, movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment? (This applied to access for this equipment to reach hazardous waste management areas)  (40 CFR 265.35 (320 IAC 4.1-17-6)	<u>n/</u> a			
6.	Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility.  40 CFR 265.37 (320 IAC 4.1-17-7)			<u> </u>	
7.	Are the arrangements documented in any manner? (Written documentation not required.)		<u>/</u>		
	•				
PRE	-TRANSPORT REQUIREMENTS:				
		YES	NO	<u>NI</u>	
1.	Is waste packaged in accordance with DOT regulations? (required prior to movement of hazardous waste off-site) 40 CFR 262.30 (320 IAC 4.1-9-1)				
2.	Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 40 CFR 262.31-261.32 (320 IAC 4.1-9-2 & 3)			·	/
٠	· · · · · · · · · · · · · · · · · · ·				
					-
			·		

3. On-s	ite accumulation of generated hazardous wastes.
a.	Is the container clearly marked with the start of accumulation date?  40 CFR 262.34 (320 IAC 4.1-9-5)
b.	Are all containers visible for inspection?  40 CFR 262.34(a)(2) (320 IAC 4.1-9-5)
*c.	Have more than 180 days elapsed since the date inspected in (a)?  40 CFR 262.34 (320 TAC 4.1-9-5)
đ.	Do wastes remain in accumulation tanks for more than 180 days? 40 CFR 262.34 (320 IAC 4.1-9-5)
<b>e.</b>	Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?  40 CFR 262.34 (320 IAC 4.1-9-5)

 $<sup>{}^{\</sup>star}$ If the waste must be transported over 200 miles, the generator may accumulate waste for 270 days.

### Use and Management of Containers

### 40 CFR 265 Subpart I as required by 262.34 (320 IAC 4.1-9-5)

N/A

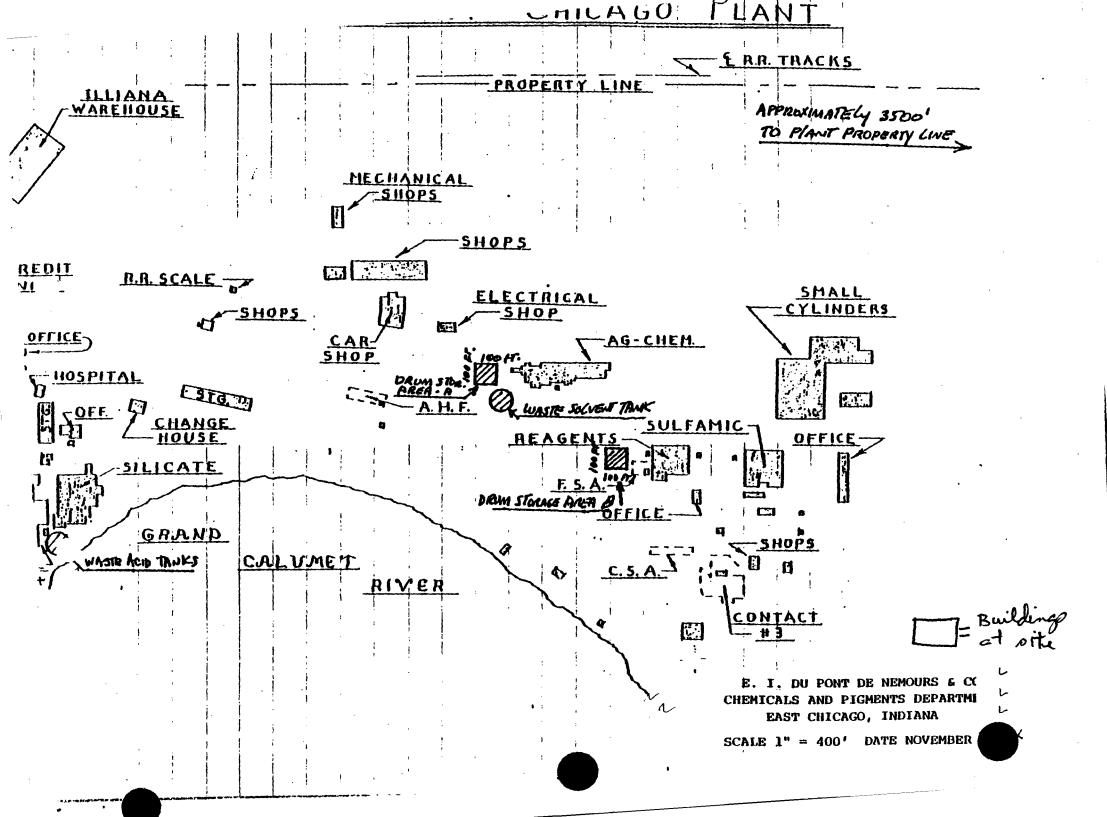
		YES	NO	<u>NI</u>	
1.	Are containers in good condition? 40 CFR 265.170 (320 IAC 4.1-23-1)			· · · · ·	
2.	Are containers compatible with waste in them? 40 CFR 265.172 (320 IAC 4.1-23-3)				
3.	Are containers managed to prevent leaks? 40 CFR 265.173(b) (320 IAC 4.1-23-4)				
4.	Are containers stored closed? 40 CFR 265.173(d) (320 IAC 4.1-23-4)			· · · ·	
5.	Are incompatible wastes stored in separate containers? (If not the provisions of 265.17(b) apply) 40 CFR 265.177(a) (320 IAC 4.1-23-7)				
6.	Are containers of incompatible waste separted or protected from each other by physical barriers or sufficient distance?  40 CFR 265.177 (320 IAC 4.1-23-7)			· · · ·	
7.	If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed?  40 CFR 265.17 (320 IAC 4.1-16-8)				
	a. Special handling?				
	b. No Smoking signs?		· · ·	· · ·	
	c. Separation and protection from ignition sources?				
8.	Does the container storge area have adequate aisle space so that containers can be inspected for leaks or deterioration without moving the containers during the inspection (about 2.5 feet)?  320 IAC 4.1-23-4	· · · ·			

### Tanks

### 40 CFR 265 Subpart J as required by 262.34 (320 IAC 4.1-9-5)

NA

		YES	NO	NI
1.	Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank?  40 CFR 265.192 (320 IAC 4.1-24-2)			· .
2.	Doe uncovered tanks have at least 60 cm (2 feet) of free-board, or dikes or other containment structures? 40 CFR 265.192 (320 IAC 4.1-24-2)			
3.	Do continuous feed systems have a waste-feed cut-off? 40 CFR 265.192 (320 TAC 4.1-24-2)			
4.	Are reactive & ignitable wastes in tanks protected or rendered nonreactive or non-ignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 40 CFR 265.198 (320 IAC 4.1-24-6)			
5.	Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?  40 CFR 265.198 (320 IAC 4.1-24-6)			· · ·
	Tank capacity:gallons			
	Tank diameter:feet			•
	Distance of tank from property line		fee	et ,
	(See table 2-1 through 2-6 of NFPA's "Flammable and Cocode - 1977" to determine compliance.)	mbust	able	Liquids
6.	If required, are the following special requirements for ignitable, reactive, or incompatible wastes address 40 CFR 265.17 (320 IAC 4.1-16-8)	sed?		
	a. Special handling?		· · ·	
	b. No smoking signs?	· · ·		
	c. Separation and protection from ignition sources?		· · ·	



### gainid, uirril'enl.b.

777 BIG TIMEER ROAD . ELGIN, ILLINOIS 6

TRANSPORTER

SCHEDULET SCHEDULED SERVICE TERRITORY 87- 12 01

RON GETTIG 219-763-4554 100-1000 PF

5-034-06-0184

55921

5-034-06-7214-3 E I DUPONT DE NEMBURS & CO ATYPAZ, A,7 HOERSTS HILL NTTA 5215 KENNEDY AVE

EAST CHICAGO

IN 46312

DUPONT ACCTS PAYABLE-ATTN J SCOTT

PO BOX 787

SERVICE DATE													
SERVICE DATE	ALESMAN'S NO.	SALES SPECIALIST	SALES TAX EX	MPTION	NUMBER	HANDLING CODE	CRI CC	DIT DE	PORT OVER 45	DAYS	PREVIOUS BALANCE		PORTION OVER 60 DA
24-87	3029	XXXX	EXEMPT				N		XXX	XXX	253.5	0	·
SINES CHAIN	CUSTOMER P.C	O. NUMBER	GENERATOR/CUSTON	ER PHONE 1	MAJO	PIAL O.C	. sv	C P/S PROD	P/S S	ERVICE TAX	C.O.M.S.	TAX	PRODUCT
07 0980	LOGE-5900	08-A	219-398	<u>-204</u>	0 N	ם א ב		03 00	1 .	0.5	-05		-05
			N	ACHIN	E SERVIC	E SECTIO	N						
MACHINE NUMBER	SERVICE CHARGE	SALES	TOTAL CHARGE	SERVICE TERM	CHANGE SERVICE WEEKS	ТО		REMAR	KS		(PLEASE	CHECK	PECTION SECTI APPROPRIATE B GOOD
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63-40695	29.00	.00	29.00	02		SILI					DECALS IN 9	mage Ble	Ź
63-6574 <u>]</u>		.00	33.75	04				AG CI		<del></del>	PUSIBLE UN INSTALLED	2	_ ′2
<u>63-66625</u>	29.00	.00	29.00	02	├	3-31	-85	PWR I	1SE		EMÉRIGENC OF LID UNO MACHINE PE GROUN		
		-						<u> </u>			LOCAL PHO STICKER AN TO MACH	NE NO FFIXED	
		<del> </del>	<del> </del>					<del></del>			TO MACE	₩Ē.	
		+			<del>                                     </del>						<del> </del>		
TOTAL			† · · · · · · · · · · · · · · · · · · ·	GEN	ERATOR US	SA EPA ID NO	. 11	GENER	ATOR S	TATE ID NO.			
ERVICE SECTIO	N		\$125.50	IN	D005	174354					1	5-2	225-19
			UNIFORM HA	ZARDOU	S WASTE	MANIFEST	INFOR	MATION					
	AINERS									Ţ	certify that my haza 20 pounds (100 kg)	100us we	iste streams total i
PALS 16	GAL 30 GAL NO DM	US DOT	Description (Includ	ina Propi	er Shipping	Name, Ha	ard Cia	ss, and ID	Number		m not required to ot	busin an i	PA identification
<del></del>	5	_ Waste, P	etroleum Naphtha	Combus	itible Liquid	d, UN 1255				j	GENERATO	OR'S	1/h
<u></u>	<del></del>	_ Waste, C	ompound, Cleanin	g. Liquid,	, Corrosive	Material, N	A 1760				INITIAL		4. C
		Total Occasion	Number of Da		a MaiDau	at Daile	35	16 Gal.	45	20 Col	80		
DESIGNATI	D FACILITY NA		PRESS: 54		-KLE			10 Gai.	<del></del>	, 30 Gal. EPA ID NO		000	71442
5050 EAG					***								
			PUKI	AGE.	IN		4	6368				-	
	LL AVE			AGE, PRODU		S SECTIO		6368		E ID NO.			
PRODUCT NUMBER	DEALER LIVE			PRODU			N	6368 DEALER PRICE			SALES		AX LII
PRODUCT	DEALER		SALES TAV	PRODU	CT SALE	S SECTIO	N	DEALER	STAT	E ID NO.	SALES		AX Lii
PRODUCT NUMBER	DEALER U/M		SALES TAV	PRODU	CT SALE	S SECTIO	N DCT ER	DEALER PRICE	STAT U/M	E ID NO.	SALES		AX LII
PRODUCT NUMBER	DEALER PRICE U/M 43.50CS 49.00CS		SALES TAV	PRODU	CT SALE	S SECTIO	1 ER 609	DEALER PRICE 65.0	U/M DEA SPR	E ID NO.	SALES		AX Lii
PRODUCT NUMBER 101 104 105 106	DEALER PRICE U/M 43.50CS 49.00CS 47.50CS 49.00CS		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0 9.8 3.7	U/M DEA DEA DEA	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106	DEALER PRICE U/M 43.50CS 49.00CS 47.50CS 49.00CS		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106 107 108	DEALER PRICE U/M 43.50CS 49.00CS 47.50CS 49.00CS 43.50CS 49.00CS		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0 9.8 3.7	STAT	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106 107 108 602	DEALER PRICE U/M 43.50CS 49.00CS 47.50CS 49.00CS 43.50CS 43.50CS 7.75EA		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106 107 108 602 604	DEALER PRICE U/M  43.50CS  49.00CS  49.00CS  49.00CS  43.50CS  49.00CS  7.75EA  15.50EA		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106 107 108 602	DEALER PRICE U/M 43.50CS 49.00CS 47.50CS 49.00CS 43.50CS 43.50CS 7.75EA		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX TO
PRODUCT NUMBER 101 104 105 106 107 108 602 604	DEALER PRICE U/M 43.50 CS 49.00 CS 47.50 CS 49.00 CS 43.50 CS 49.00 CS 7.75 EA 15.50 EA 2.78 EA		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX LII
PRODUCT NUMBER 101 104 105 106 107 108 602 604 610 611 619 666	DEALER PRICE U/M 43.50 CS 49.00 CS 47.50 CS 49.00 CS 43.50 CS 49.00 CS 7.75 EA 15.50 EA 2.78 EA 2.78 EA 3.77 EA 28.80 BX		SALES TAV	PRODU	CT SALE	S SECTIO	609 612 600 613	DEALER PRICE 65.0( 9.8) 3.7( 10.6)	STAT	QUANTITY DELIVERED	SALES		AX LII
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LEGAL Wilmington, Delaware 19898

September 10, 1993

### **VIA OVERNIGHT MAIL**

United States Environmental Protection Agency Region V, RCRA Enforcement Branch (HRE-8J) 77 West Jackson Boulevard Chicago, IL 60604

Attention Thad Slaughter

Re: RCRA § 3007 Information Request

Dear Messrs. Boyle/Slaughter:

In response to your July 8, 1993 RCRA § 3007 Information Request regarding DuPont's East Chicago Plant, and in accordance with our agreement to extend DuPont's response time to September 10, 1993, I have enclosed the following:

- 1. DuPont's narrative response to EPA's RCRA § 3007 Information Request; and
- 2. Copies of responsive documents, each containing a DuPont identification number for our own control purposes.

Thank you for your cooperation and if you have any further questions, please contact me at (302) 773-0149.

Very truly yours,

Steven A. Coppola

SAC:pjd Enclosures



LEGAL Wilmington, Delaware 19898

September 17, 1993

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

United States Environmental Protection Agency Region V, RCRA Enforcement Branch (HRE-8J) 77 West Jackson Boulevard Chicago, IL 60604 RECEIVED
SEP 2 3 1993

OFFICE OF RCRA WASTE MANAGEMENT DIV EPA, REGION (

Attention: Thad Slaughter

Re: DuPont/East Chicago RCRA §3007 Information Request

IND 005 174 354

Dear Messrs: Boyle/Slaughter:

Please amend DuPont's September 10, 1993, Response Answers A. (iv) and F(ii), (iii) to read as follows:

- A. (iv) DuPont has been unable to uncover any information or documents relating to the sampling strategy used in collecting samples for flue dust analyses prior to 1993. The only sampling strategy information available is that used for the 1993 analysis of the demolition debris. See Document DEC 0010998-001.
- F. (ii) To the best of its knowledge, information and belief, DuPont has no documentation or information relating to the burning of Ag waste on-site.

DuPont previously produced documents to EPA earlier this year. Document DEC 001052 is a letter from DuPont to the Indiana Department of Air Quality Control dated July 28, 1972, requesting an open burning permit to dispose of 1000 drums containing methyl ethyl ketone and an organic sludge. The Department granted a conditional open burning permit to DuPont on July 31, 1972, See Document DEC 0010107-001.

F. (iii) To the best of DuPont's knowledge, information and belief, WMU #15 is believed to be the area where the burning of methyl ethyl ketone waste occurred.

Should you have any questions regarding these changes please feel free to contact Steve Coppola or myself.

Sincerely,

Robyn G. Magee

Senior Legal Assistant

cc: Steve A. Coppola, Esq.

### DuPont East Chicago RCRA Information Request September 10, 1993

- A. In reference to documents DEC0010005, page 011, DEC0010010, page 110, and DEC 0010926, please provide:
- (i) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other documents containing chemical or physical data about the flue dust from the "Ludox" process, since 1980;

Flue dust is generated from the silicate process and not from the Ludox process. See attached Documents DEC 0010323-002 through DEC0010323-003 and DEC 0010994-001 through DEC 0010995-004.

An analysis was conducted on the demolition debris from the silicate furnace in July, 1993. See attached Document DEC 0010996-001 through DEC 0010996-003.

(ii) a detailed description of any and all of the locations the flue dust was stored, treated, or disposed;

Ten, fifty-five gallon drums of flue dust was manifested and shipped to the DuPont Chambers Works Landfill in 1986 (See Document DEC 0010997-001). In June 1992, the silicate furnace was demolished on-site. Seventy-one drums of debris, which contain flue dust, among other demolition material have been stored on a cement floor in the old Freon® warehouse located on-site. Other demolition debris which did not contain flue dust was shipped off site for disposal. Prior to 1980, to the best of DuPont's knowledge, information and belief, flue dust was shipped off-site for disposal. DuPont has not been able to uncover any information that relates to the storage, treatment or disposal of the flue dust prior to disposal nor any documents relating to the storage, treatment or disposal of the flue dust that has not already been produced to EPA in the January 29, 1993 Response.

(iii) date(s) of shipment and the name and address of any person or place to whom any of the waste or treated waste was shipped;

DuPont has knowledge of one shipment off-site on October 21, 1986. See manifest attached as Document DEC 0010997-001.

(iv) a detailed explanation of the sampling strategy used in collecting samples for any chemical or physical analyses for the waste stream;

No wanty

DuPont has been unable to uncover any information or documents relating to the sampling strategy used in collecting samples for flue dust analyses prior to 1993. The only sampling strategy information available is that used for the analysis of the 1993 demolition debris. See Document DEC 0010998-001.

1993

(v) all quality assurance/quality control validation data packages for the analytical information to support the analytical data provided in response to this question; and

DuPont was unable to locate any quality assurance/quality control packages that was used for the flue dust analytical information that was performed prior to 1993. See Document DEC 0010999-001 through DEC 0010999-004 for the QA/QC that was used in the July 1993 demolition debris analysis.

(vi) Dates and amounts of flue dust generated at the facility.

DuPont has been unable to locate any records describing the amount of flue dust generated at the plant with the exception of Document DEC 0010323-001 and DEC 0010977-001. To the best of DuPont's knowledge, information and belief, flue dust has been continuously generated since Silicate was manufactured at the site since the early 1900's; the general plant practice has been to remove flue dust approximately once every third or fourth year from the furnace. To the best of DuPont's knowledge, information and belief, no flue dust was removed from the silicate furnace from 1986 to June 1992.

B. How did the facility manage spent solvents after 1980? The facility indicated that before August 1980, it disposed of the spent solvents by placing the waste on the ground, including 1,1,1-trichloroethane (see documents DEC 0010035, DEC0010926, and DEC 00110046). Provide copies of all documents relating to your response to this question.

The East Chicago plant retained Safety Kleen sometime between 1979 - 1981. All spent solvents were for transport and off-site disposal by Safety Kleen. Although DuPont no longer has a copy of the original contract due to its Records Retention Policy it is attaching a copy of its 1984 contract with Safety Kleen. DuPont assumes that the 1984 was very similar to the original contract. See Document DEC 0011000-001 through DEC 0011000-003.

C. Information on document DEC 0010927, page 004, indicates that the chrome pit is an extension of the HCL neutralizing pit. Describe what is meant by "extension". Provide copies of all documents relating to this question.

The term "chrome pit" apparently originated from a CH2M Hill employee when interviewing DuPont employees for the Phase 1 Report. This was not a term that was generally used by plant personnel when referencing this area.

DuPont believes that the term "chrome pit" is a misnomer which refers to an area (resembling a ditch when it was in use) between the acid neutralization pit and the Grand Calumet. This ditch at one time transported blow down water from the Freon® cooling tower and runoff from the HCl neutralization pit to the Grand Calumet River via Outfall #003. The 1972 Consent Decree, required the plant to consolidate the thirteen outfalls, including the outfall from the freon® cooling tower i.e. Outfall #003. This outfall was dammed up and the remaining water subsequently became stagnant and likely discolored due to the presence of iron.

DuPont has no documents relating to this question that were not produced in its earlier responses to EPA.

D. Information on document DEC 0010927, page 004, indicates that the HCL neutralizing pit was filled with "rubble". Provide information on reference material that describes the source, chemical and physical nature of the waste, and amount of the material disposed in the pit. Provide copies of all documents relating to your response to this question.

To the best of DuPont's knowledge, information and belief, the HCL neutralizing pit was filled with demolition debris from the Sulfuric Acid plant. The "rubble" consisted of bricks, block, plastic tower packing, and fiberglass. DuPont has no documents relating to this question that were not already produced in its January 29, 1993 Response.

- E. Information on document DEC 0010927, Page 014, describes operations relating to waste produced in the sulfamic process. In relation to this document, please provide a description of the waste sludges and tank material that includes:
- (i) the source of waste;

1988 FSA dismantlement

(ii) the chemical and physical nature of waste;

Calcium Fluoride and Calcium Sulfate

(iii) the amount of the material treated or disposed of in the pit;

To the best of DuPont's knowledge, information and belief, it no longer has any documents but estimates that approximately 5,000 gallons of sludge material was placed in the pit and neutralized during the 1988 FSA dismantlement.

(iv) the time these activities occurred at the facility; and

Activities occurred during the 1988 FSA dismantlement.

(v) the area the treated sludge from the pit were landfilled at the facility.

WMU #10 which is a bentonite lined landfill.

Provide copies of all documents relating to your response to this question. In addition, why did DuPont determine that the practice on landfilling the sludges from the pit was "not really permitted"?

DuPont did not conclude that landfilling the sludges from the pit was "not really permitted" as referenced on Document DEC 0010927-014. Again, these notes are characterizations by an employee of CH2M Hill upon discussions with DuPont employees. WMU #10 was created as a result of the 1972 Consent Order. See attached documents, DEC 0011014-001 through DEC 0011018-002.

- F. Information on document DEC 0010927, page 001, describes operations relating to the burning of Ag waste at the site. In relation to this document, please provide the following:
- (i) the chemical and physical nature of waste;

DuPont has been unable to locate any document that would identify the contents of the drums. In addition, DuPont has interviewed several employees from the plant who were unable to identify the contents of the alleged Ag waste reportedly burned at the site. (See response to Question #10 of DuPont's January 29, 1993 submittal to EPA.)

(ii) the time these activities occurred at the facility; and

To the best of its knowledge, information and belief, DuPont has no documentation or information relating to the burning of Ag waste on-site.

DuPont previously produced documents to EPA earlier this year. Document DEC 001052 is letter from DuPont to the Indiana Department of Air Quality Control dated July 28, 1972 requesting an open burning permit to dispose of 1000 drums containing ethyl ketone and an organic sludge. The Department granted a conditional open burning permit to DuPont on July 31, 1972, see Document DEC 0010107-001

(iii) the area where the burning occurred.

To the best of DuPont's knowledge, information and belief, WMU #15 is believed to be the area where the burning of ethyl ketone waste occurred.

G. Information on document DEC 0010927, page 008, indicates that there is a reference to Ag chemical liquid waste which is evidently being incinerated off-site. In relation to this document, please provide the following:

### (i) the chemical and physical nature of waste;

To the best of DuPont's knowledge, information and belief, toluene still bottoms were distilled from a solution containing trace amounts of hexazinone in a hexane/toluene mixture. The remaining heel consisted of toluene and any residual hexazinone/hexane mixture solids. This heel was allowed to accumulate over successive batch distillations until the tank reached approximately 80% level after distillation. Arrangements were then made to ship the heel to a DuPont plant located in Ponchartrain, LA or for contract incineration of the liquid toluene waste off-site. The recovered toluene was shipped by back haul to DuPont's Agchem plant in Texas in the same tank truck which delivered the original crude toluene product. The recovered hexane was recycled through the process at East Chicago.

(ii) the storage place, method, and time material waste was stored at the facility; and

See Answer G (i). Ag chemical liquid waste was stored in a storage tank (WMU #4) prior to being transported off site.

(iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the waste.

DuPont was unable to uncover any documents relating to this question. Since the Agchem operation shut down in 1986, any such documents would not have been kept under DuPont Records Retention policy.

- H. Information on document DEC 0010927, page 008, indicates that there is a reference to wash water stored in rail cars near the toluene-containing rail cars. In relation to this document, please provide the following:
- (i) the chemical and physical nature of waste;

DuPont believes that the wash water stored in rail cars that is referenced in DEC 0010927,page 008 was apparently characterized incorrectly by CH2M Hill interviews with DuPont employees. The "wash water" mentioned at DEC 0010927-008, most logically refers to flush water used to leak test Agchem process equipment after cleaning, dismantling and reassembly.

The Wet End process in the Agchem facility at East Chicago was used for manufacturing Hexazinone® and Siduron® which are active ingredients for the pesticides, Velpar® and Tupersan®, respectively. The Wet End Process was operated on a campaign basis to alternately manufacture Hexazinone® and Siduron® for 2-4 month periods. Special cleaning procedures were necessary to ensure that no cross-contamination occurred in any of the products. At the end of each product campaign, the vessels were emptied and all solvent lines were purged with nitrogen to remove any flammable liquids to allow safe dismantling of vessels and piping for high pressure water cleaning.

Area safety procedures required flame permits and explosimeter tests to verify that flammable vapors were not present during dismantling of process piping and equipment. The decontamination procedure consisted of dismantling all process tanks and piping and performing individual water jetting of all interior process surfaces to metal cleanness. Any solid product residue generated during the cleaning process was collected in fiber drums with plastic liners for waste disposal.

The process was then reassembled and a crystallizer was filled with water and a water flush of the system was performed to detect any piping leaks. The flush waster was then pumped to a rail car. The flush water was then sampled and analyzed to ensure that no solvent layer was present before draining the water to the ground.

(ii) the storage place, method, and time material waste was stored at the facility; and

To the best of DuPont's knowledge, information and belief, no solvents were present or stored in the rail cars containing the flush water. The flush water was stored in rail cars located at WMU #4.

(iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifest, or any other document containing chemical or physical data about the waste.

DuPont no longer has copies of responsive documents to this question.

Provide copies of all documents relating to your response to this question.

I. Information on documents DEC 0010323, pages 001-003, DEC 0010158, page 001, and DEC 001033, page 001, pertains to the generation of "chequer flue dust" wastes. If the waste is identical to the waste identified in question A, please acknowledge this fact, and disregard the following questions.

The waste is identical to the waste identified in Question A.

- J. Document DEC 0010323, page --1, indicates that chromium containing bricks will be replaced. With respect to chromium containing bricks, please provide:
- (i) any documents related to the activities associated with the generation, storage, treatment, and disposal of the hazardous and/or nonhazardous chromium-containing bricks at and from the facility; and

DuPont no longer has any documents, except for the MSDS from the manufacturer of the chromium-containing bricks stating that the bricks are non-hazardous. See Document DEC 0011001-001 through DEC 0011001-003. Based upon what was provided in the MSDS, the old refractory brick was deemed non-hazardous and shipped off-site for disposal. In addition, please see response to Question A.

(ii) a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment and disposal of hazardous an/or nonhazardous chromium containing bricks at and from the Facility.

See response to J (i)

Provide copies of all documents relating to your response to this question.

K. Information in document DEC 0010010 pertains to the shipment of a waste to the CID landfill. Provide any documents related to the activities associated with the generation, storage, treatment, and disposal of the waste referenced in document DEC 0010010. Provide a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment, and disposal of nonhazardous waste reference in document DEC 0010010.

To the best of its knowledge, DuPont generated 110 drums of floor sweepings from the Ag building between May 1987 through May 1988. DuPont personnel routinely sprinkled a dust control material on the floors of the Ag warehouse as part of normal housekeeping procedures. Drums containing floorsweep were landfilled as non-hazardous waste for disposal. DuPont is attaching waste manifests, waste characterizations and waste permits stating that the floorsweepings were non-hazardous waste. See Documents DEC 0011002-001 through DEC 0011013-001.

#### L. CERTIFICATION

DuPont will provide the Agency with an appropriate certification after the Agency provides DuPont with the statutory authority for this request.



AIR & WATER POLLUTION-SOLID WASTES

ENGINEERING, INC.

ENVIRONMENTAL CONSULTING AND TESTING

Telephone (219) 464-2389

2400 Cumberland Drive Valparaiso, Indiana 46383

### LABORATORY REPORT

SAMPLING - ANALYSIS - CONSULTING

CLIENT E. I. DuPont & DeNemours	DATE Becember 27, 1985
ATTENTION Mr. John Orban	PHONE977-4619
ADDRESS 5215 Kennedy Avenue, East Chicago, IN 46312	DATE OF SAMPLE RECEIPT
SAMPLE COLLECTED BY DuPont & DeNenours Personnel	November 25, 1985 (2673)

SAMPLE NAME: Silica Base Solids

SAMPLE DATE: November 25, 1985

TOTAL CONSTITUENT ANALYSIS
(Original Sample)

EP TOXICITY
Performed according to EPA SW-846.
All leachate results determined by
Method of Standard Additions

PARAMETER	RESULTS (ag/kg)	<u>PARAMETER</u> EP Leachate	<b>BEZNITI</b> Z	EPA MAXIMUM CONCENTRATION
Arsenic	0.389	Total Chronium	89.6	5.0
Barium	49.9			
Cadmium	8.8	Hexavalent		
Chronium	2620	Chronium	89.6	
Lead	. 15.3			
Mercury	0,29			
Selenium	1.25			
Silver	<4.2			
Copper	15.1			
Nickel	26.4	Leachate Condition	ns	
Zinc	81.5			
Total Cyanide	⟨0.5	#ZSolids: N/A Initial pH: 12.5 Final pH: 9.4	Volume Ac	mple Extracted: 100 cetic Acid Added (mLs): 400 eionized Water Added (mLs): 1600

\$As per SW-846 Method 1310 N/A = Non-applicable

ALL RESULTS REPORTED IN MG/L UNLESS OTHERWISE NOTED

les



ENVIRONMENTAL CONSULTING AND TESTING
AIR & WATER POLLUTION-SOLID WASTES SAMPLING - ANALYSIS - CONSULTING

akf

Telephone (219) 464-2389

2400 Cumberland Drive Valparaiso, Indiana 46383

#### LABORATORY REPORT

CLIENT E.I. DuPont DeNemours & Co.	DATE November 26, 1985
ATTENTION Mr. John Orban	PHONE398-2040
ADDRESS 5215 Kennedy Ave., East Chicago, IN	DATE OF SAMPLE RECEIPT
SAMPLE COLLECTED BY DuPont Personnel	October 24, 1985 (2427)

PARAMETER		RESULTS	cheques	Boson &
PARAMETER		STACK ELUE	- dust	CHERNA
·.	•	Powder 10/24/85	3/15/84	11/25/35
Chromium		1800	1280 SO TOPAL S	2620 TOME MAYER
Arsenic		25	20.	0.359
Cadmium		77.5	200	8.8
Lead	÷	590	270	15.3
Selenium		5.3	4.5	1.25
Zinc		134	150 -	- 81.5
Copper	•	18	25	15.1
Hg -			— 0.055 — 60 —	- 26.4
Ni CM			<5	<0.5
LL RESULTS REPORTED IN	MG/KG UNLESS	OTHERWISE NO	TED	<b>*</b> ***********************************
	41 1 -4	- 1411 18	130 17 51.413	<del>*</del> 9.9

Approved by Lian J. Haise

DEC 0010323 Manager of Operations

003

ı	08/10/93 08:41	E. I. DU	PONT CHEM	WASTE .	003	: .
.· . •	WASTE CHAR	ACTERIZATION FOR	M (WCF)	DATE	: <u>4/16/84</u> N: 8/6/86	<u> </u>
ī.	LOCATION C&P East Chi	cago	CONT	RACTOR'S COD	E:	<del></del>
	EPA I.D.   IND005174354		DUF	ONT CODE:	SFD	<u> </u>
	EPA CODE D007(E)		STAT	E CODE:	N/A	
		1				
	NAME OF WASTE: FLUE DUST		D. CONCEN	VISO A IPT CNI		<del></del>
	COMPOSITION  JOR COMPONENTS	C. ONE TIME OR TYPICAL ANALYSIS		GE E.	EXPOSURE LIMI ACGIH ++OSH	
	Silica (Sand)	ANABIOLO	70	50	0.1mg/m <sup>3</sup>	
2				(R	espirable Dus	<u>t)</u>
	Soda Ash	A	50		10.0mg/m <sup>3</sup> (Nuisance Dus	L 1
4. –	Trace Heavy Metals		< 0.3		0.5mg/m <sup>3</sup>	<u>67</u>
	ACE COMPONENTS NOT LISTED	ABOVE (PPM) (1)			WASTE CONTAI	<u>N:</u>
	1-040 pg - 50 - cd - 0.0	01± 0	(VI)	erw marriae	Mac No	v
AG U	As 0.40 Ba 50 Cd 8.8 .1 F* 0 Hg 0.29 I* 0	N* 0 Ni 26.4	D* 00.0	CYANIDES	YES NO	
Pb 15	$\frac{.1}{.3}$ S* 0 Se $\frac{0.29}{1.3}$ Zn $\frac{0}{81.5}$	M. 0 MT 50.4	<u> </u>	PCB'S	YES NO	<u>X</u>
				PRENOLICS -	YES NO	X
		•		Insecticide	S, PESTICIDES	/
_				HERBICIDES,		
OTHER				RODENTICIDE	s xes no :	<u>x</u>
IV.	PHY. STATE AT 25°C (CIRCLE OTHER  IS THERE A DUSTING HAZE  MULTIPLE PHASES? NO  CAN THE WASTE BE PUMPER  FREE FLOWING LIQUID	ARD IF CONTAINER  VOL' & OF EACH  D? NO POURE  LAYER N/A (V	s are open Phase N	ED? No :		
	<ul><li>PRESSURE OF CONTAINER</li><li>SEPARATE PHASE WATER</li></ul>		ED SPECIFI	C GRAVITY A	64 1.2	
	o borinanto Timbo William	2011	W MINOTI			
ν.	SHIPPING CONTAINERS					
	BULK DRUMS MATER	7110		MC CODE:	T COLUMN TAR	5-
•		IALS NSTR. DOT SP			CONTAINE	
	55 Gallon Stee			290 lbs.		
					Waste	
OTHER						_ =
VI.	PROPERTIES					0
<b>V1.</b>	FLASH POINT N/A °F (CLA COLOR Gray/Light Brown					EN
	REACTIVE No					
	TOXIC Waste expected to expected to experience No				valent chromi	<u>ım</u>
	SHOCK SENSITIVE NO	RADIOACT	E No	ETIOLOGIC	TAT No.	
	OTHER	PART TOOLE A			140	
			_			_ <b>O</b>
VII.	D.O.T. SHIPPING NAME Ha:	zardous Waste So	lid, N.O.S			_5
	D.O.T. HAZARD CLASSIFICATED.O.T. PLACARD N/A	ION ORM-E	178 11 11	110	N 8 NO 019	<u> </u>
	NA INA	D.V.I. LANDEL	VA U.N	. NO.	N.A. MJ. 310	- <u>1</u> -00
VIII.	VOLUME					
		THIS REQUES	r N/A	PER SI	HIPMENT 0.5-1	.0
	:				TONE	· 6 7
IX.	REMARKS (TREATMENT OF SPI	LLS/SAFETY SUGGE	stions/msn	S) See foot	tnotes attache	<u>ad</u> 11
			·		·	- 7

\*ORGANICALLY BOUND 1530T PREPARED BY:

RONMENTAL AFFAIRS

#### FOOTNOTES

- (1) Analytical results for hexavalent chromium based on RCRA extraction procedure (EP) toxicity test. All other trace components based on total constituent analysis.
- (2) Cyanide not expected to be present, but found at <0.5 ppm in one sample.



200

0010994



1150 Junction Avenue - Schererville, Indiana 46375 1-219-322-2560 • 1-800-428-3311 Fax 1-219-322-0440

Date:

5/5/92

Recd:

4/23/92

MO #:

24-174

DuPont

Laboratory Smp 10 No.: AB00353

DESCRIPTION:

Western Springs, IL 60558

{Unless otherwise noted;

REPORT TO:

4640 Grand Avenue

Jack Ely

MEC

P.02

10:39

93

Sep

TEL No.219-322-0440

TENCO LABORATORIES

Furnace Flu Dust

results in parts per million - ppm] PARAMETERS:			4/21/92				
	TOTAL	REACTIVE	ŀ	TOTAL.	EP TOXICITY	TCLP	
FLASHPOINT-(140°F)	>200°F		SILVER			(0.002	
Percent Acidity			ARSENIC			0.189	
Percent Alkalinity	29.17	İ	BARIUM			<0.050	
pH (2-12.5**)	12.0	i	CADMIUM			0.005	
Fercent Total Solids	99.67	!	i CHROMIUM***			78.7	
SULFIDE	<0.4	(0.4	MERCURY			(0.0001	
CYANIDE	0.677	<0.677	LEAD			0.055	
PHENOL	0.539	·	SELENIUM			0.141	
Paint Filter Test	Pass	· 			<u> </u>		
TOX	<sup>i</sup> ∢5		:				
Total Organic Carbon	62	·			<u> </u>	:	
	· · · · · · · · · · · · · · · · · · ·		:		· ·		
	!					:	
				*** Total			
-	<u> </u>				·		

DEC

0010995

ADA certified by:

1150 Junction Avenue - Schererville, Indiana 46375 1-219-322-2560 • 1-800-428-3311 Fax 1-219-322-0440

'L'

Date:

5/5/92

Recd:

4/23/92

WO #:

24-174

DuPont

P.03

TENCO LABORATORIES

REPORT TO: Jack Ely

4640 Grand Avenue

Western Springs, IL 60558

MEC

3	EPA METHOD	SW 846-8080	} 		· · · · · · · · · · · · · · · · · · ·			
10	Laboratory Smp ID No.:	AB00353						
8,93	DESCRIPTION:>  Unless otherwise noted;	Furnace Flu Dust						
Sep	results in milligram/ kilogram - mg/kg PARAMETERS:V	4/21/92						
	PCB's as:							
						<u> </u>		
40	AROCHLOR 1016	ND						
-04	AROCHIOR 1221	ND						
225	AROCHLOR 1232	ND		<u> </u>				
9-3	AROCHLOR 1242	ND		<u> </u>			 	
121	AROCHLOR 1248	ND						
위	AROCHLOR 1254	ND	<u> </u>			-		
	AROCHLOR 1260	ND		}				
F								
1	TOTAL PCB	ND						
က္ခါ			ļ	<u> </u>	<u> </u>		<u>.</u>	
3			1	ļ	<u></u>			
-			<del></del>	<u> </u>	<del> </del>			
HBUKHIUKIE			1		<u> </u>			
Ë		<b> </b>						<del> </del>
NCD				 				
۶ J	ND=Not Detected at J	ma/ka				•		

ND=Not Detected at 1 mg/kg.

EC 0010995



002 Partified by:

1150 Junction Avenue - Schererville, Indiana 46375 1-219-322-2560 • 1-800-428-3311 Fax 1-219-322-0440

Date: 5/5/92

Recd: 4/23/92

24-174 WO #:

Laboratory Smp ID No.:	AB00353				
DESCRIPTION: —> (Unless otherwise noted; results in parts per	Furnace Flu Dust		tection mits	Regulatory Level	EPA HV
million - ppm) PARAMETERS:	4/21/92			(mg/L)	Numbe
VOLATILES-ZHE ORGANICS*					
Benzene	ND	0.0	02 ppm	0.5	D018
Carcon Tetrachloride	ND	0.0	002 ppm	0.5	2019
Chlorocenzene	ND	0.0	002 ppm	100.0	D023
Chloreform	ND	0.0	002 ppm	6.0	D022
1,2-Dichloroethane	ND	0.0	02 ppm	0.5	5200
1,1-Dichloroethylame	ND	0.0	002 ppm	0.7	D029
Methyl Ethyl Kedone	ND		002 ppm	200.0	D835
Tetrachloroethylene	ND	 0.0	002 ppm	0.7	D039
Trichlorcethylene	ND	0.0	002 ppm	0.5	D <b>0</b> 40
Vinyl Chloride	ND	0.0	002 ppm	0.2	D043
*ZHE=Zero Headspace Extract					

DEC pt Detected

REPORT TO:

4640 Grand Avenue

Western Springs, IL 60558

Jack Ely

MEC

0010995

003 Contified by:

1-219-322-2560 • 1-800-428-3311

Fax 1-219-322-0440

REPORT TO: Jack Ely 4640 Grand Avenue Western Springs, IL 60558

.05

MEC



Date: 5/5/92

4/23/92 Recd:

24-174

DuPont

DESCRIPTION: —.> [Unless otherwise noted; results in parts per million - ppm]	Furnace Flu Dust 4/21/92			Detection Limits	Regulatory Level (mg/L)	E: H Muml
PARAMETERS:	4/21/52					
SEMI-VOLATILES-TCLP ORGANIC	s*					
Cresol, total	ND			0.002 ppm	200.0	002
1,4-Dichlorobenzene	ND			0.002 ppm	7.5	D02
2,4-Dinitrotoluene	ND			0.002 ppm	0.13	D03
Hexachlorobenzene	ND			0.002 ppm	0.13	D03
'Hexachlorobutadiene	ND			0.002 ppm	0.5	D03
Hexachlorethane	ND.	!		0.002 ppm	3.0	203
Nitrobenzene	ND			0.002 ppm	2.0	D03
Pentachlorophenol	ND		<u> </u>	0.002 ppm	100.0	D03
Pyridine	ND			0,002 ppm	5.0	503
2,4,5-Trichlorophenol	0.612			0.002 ppm	400.0	D64
2,4,6-Trichlorophenol	ND	!		0.002 ppm	2.0	D04
		<del>                                     </del>	<u> </u>			
		<u> </u>	8 0			<del> </del>
	· · ·					

DEC



Certified by:

TENCO ENVIRONMENTAL LABS 1152 JUNCTION AVENUE SCHERERVILLE IN 46375 (219) 322-0450 (800) 643-1835 FAX (219) 322-0440

Sample ID No. AB14783 Date Received 07/22/93 Date Collected 07/21/93 Time Collected Report Date 08/02/93

NEW JERSEY 55634 WISCONSIN 999317770 CALIFORNIA 1214 CERTIFICATION NOS .: ILLINOIS 100210 P.O. NO. Ken Jacyk

DuPont 5215 Kermedy Avenue East Chicago, IN 46312 Proj. NO. 25-963 Samp.Desc. - FLUE DUST SAMPLE Sample Collector

		ANALYTICAL R	EPORT				
ANALYSIS	RE:	SUL T	,	MOL	ANALYSIS DATE	INIT	METHODOLOGY
FLASHPOINT.PENSKY-MARTIN	>200	DEG. F		200	07/26/93	DTG	1010 SW846
ALKALINITY.X.PERCENT	30.6	x	(	0.001	07/29/93	DTG	
socios.%	90.02	*		0.01	07/26/93	TM	2540-SOLID\$
SULFIDE IN SOLIDS	<0.4	MG/KG		0.4	07/27/93	DTG	SU846 9030
SULFIDE REACTIVE	<0.4	MG/KG		0.4	07/27/93	DTG	SN846
REACTIVE.CYANIDE	<0.024	MG/KG	(	0.024	07/28/93	RM	SW846
PHÉNOLICS-WATER	0.296	MG/L	•	0.0110	07/28/93	DTG	5530(C)
PAINT.FILTER.TEST	PASSED	PASS/FAIL			07/23/93	KC	9095
TOTAL.ORGANIC_HALOGEN	130	MG/L		5	07/27/93	RM	SW846 9020
ARSENIC.TCLP	0.153	MG/L	ļ	0.010	07/28/93	PAL	1311/7060
SILVER.TCLP	0.002	MG/L		.002	07/28/93	PAL	1311/7760
BARIUM.TCLP	0.759%	MG/L	•	0.050	07/26/93	VT	1311/7080
CADHIUM.TCLP	<0.002	MG/L	(	0.002	07/27/93	PAL	1311/7130
CHROMIUN,TCLP	31.898	MG/L	i	0.004	07/26/93	<b>VT</b> ,	1311/7190
MERCURY_TCLP	<0.0010	MG/L	(	0.0010	07/29/93	RM	1311/7471
SELENTUM.TCLP	0.047	MG/L		-010	07/27/93	VT	1311/7740
LEAD.TCLP	0.033	MG/L		.010	07/28/93	PAL	1311/7420
	····				**		

Continued on next page.



0010996



Ken Jacyk

DuPont

TENCO ENVIRONMENTAL LABS

NALYSIS	RES	ULT	MDL	ANALYSIS Date	INIT	METHODOLOGY
YANIDE	<0.024	MG/KG	0.024	07/28/93	RM	<b>\$\\846-9</b> 010
ENZENE*	NOT DETECTED	MG/L	0.20	07/28/93	68	SU846 8021
ARBON.TETRACHLORIDE*	NOT DETECTED	MG/L	0.20	07/28/93	GS	SU846 8021
HLOROBENZENE*	NOT DETECTED	MG/L	2.00	07/28/93	G\$	\$W846 8021
HLOROFORM*	NOT DETECTED	NG/L	1.00	07/28/93	GS	SW846 8021
,2-DICHLOROETHANE*	NOT DETECTED	MG/L	0.20	07/28/93	GS	SW846 8021
,1-D1CHLOROETHYLENE*	NOT DETECTED	MG/L	0.40	07/28/93	GS	su846 8021
ETHYL.ETHYL.KETONE*	NOT DETECTED	MG/L	2.00	07/28/93	GS	SW846 8021
ETRACHLOROETHYLENE*	NOT DETECTED	MG/L	0.40	07/28/93	GS	\$W846 8021
RICHLOROETHYLENE*	NOT DETECTED	NG/L	0.20	07/28/93	GS	SW846 8021
INYL.CHLORIDE*	NOT DETECTED	MG/L	0.08	07/28/93	GS	SW846 8021
RESOL, TOTAL**	NOT DETECTED	MG/L	2.00	07/29/93	\$\$	<b>SW8</b> 46 <b>8</b> 270
,4-D1CHLOROBENZENE**	NOT DETECTED	MG/L	2.00	07/29/93	<b>S</b> S	SW846 8270
,4-DINITROTOLUENE**	NOT DETECTED	MG/L	0.08	07/29/93	\$\$	SW846 8270
EXACHLOROBENZENE**	NOT DETECTED	MG/L	0.08	07/29/93	<b>S</b> S	SW846 8270
EXACHLOROBUTAD I ENE**	NOT DETECTED	MG/L	0.20	07/29/93	\$\$	SW846 8270
EXACHLOROETHANE**,	NOT DETECTED	MG/L	1.00	07/29/93	SS	SUB46 8270
ITROBENZENE**	NOT DETECTED	MG/L	0.50	07/29/93	SS	SW846 8270
ENTACHLOROPHENOL**	NOT DETECTED	MG/L	1.00	07/29/93	\$\$	SW846 8270
/RIDIME**	NOT DETECTED	MG/L	2.00	07/29/93	SS	\$W846 8270
,4,5-TRICHLOROPHENOL**	NOT DETECTED	MG/L	2.00	07/29/93	88	\$W846 8270

Continued on next page.

DEC 0010996 002



SAMPLE NO. AB14783

TENCO ENVIRONMENTAL LABS

Ken Jacyk

DuPont

ANALYSIS ANALYSIS RESULT MDL DATE INIT METHODOLOGY 2,4,6-TRICHLOROPHENOL\*\*..... NOT DETECTED 0.50 07/29/93 \$\$ SU846 8270

\*\*\*\*\*\*\*\*\* END OF REPORT \*\*\*\*\*\*\*\*

COMMENTS \*Volatile ZHE Organics \*\*Semi-Volatile TCLP Organics

CERTIFIED BY

DEC 0010996 0003

002 08/10/93 08:39 E. I. DU PONT CHEM WASTE DO NOT WRITE IN THIS SPACE Division of Land Pollution Control - Manifest 🔑 Indiana State Board of Health P.O. Box 7035 Indianapolis, IN 48207-7035 Form Approved OMB No. 2000 0404 Expires 7 31 86; Please print or type. (Form designed for use on silts (12-pitch) typewriter) UNIFORM HAZARDOUS 1. Generator's US EPA ID No. Information in the shaded share is not required by Federal law 2. Page 1 of PARTITION OF THE PROPERTY No. WASTE MANIFEST 3. Ganarator's Name E I DoPoist Deligitations & Co. Tric. Chemicule & Pigments 5215 Recently Jure. 4. Canarator's Phon Blast Chicago, Indiana 46312 5. Transporter | Company Name Conoco 7. Transporter 2 Company Name 9. Designated Facility Name and Elfé Address
B I DuPont: DeNelfours & Co Inc Chemicals & Pignents Route 130 Despender N J 08023 11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) Total Unit Wt/Vot No. Туре Quentity Flu Dust, Barandons Whate, Solid, H.O.S. NJDEP DECAL 15. Special Handling instructions and Additional Information # 10142 16. QENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national m exempted by statute or regulation from the duty to make a waste minimization certification under ogram in place to reduce the volume and toxicity of wasts generated to the degree I have determined to be tipf treatment, storage, or disposal currently available to me which minimizes the present and future threat to Unless I am a small quentity generator who has been exemple: Section 300£(b) of RCRA, I also certify that I have a program in plei economically practicable and I have a human health and the environment. 10218 17. Transporter Victorial Sysment of Receipt of Marerials

Gregory & 2000 Dorson

18. Transporter 2 Acknowledgement of Receipt of Materials 200

Printed/Typed Name

19. Discrepancy Indigation Space

OKY to Receive on Indiana Manifest per NJDEP -Louis Casedi

Printed/Typed Name INCENT GIOIA -

Day

SPA Form \$700-22A (Rev. 11-65)

#### INTEROFFICE MEMORANDUM

Date:

21-Jun-1993 10:56am

From:

DAVID E. EPPS

EPPSDE AT A1 AT CSOC

Dept:

CHEMICALS/DERS

Tel No:

302-792-8984

TO: O. J. Meyer

( MEYEROJ AT A1 AT JLCL01 )

Subject: sampling

O.J.,

I am still trying to get Dave timmons to answer the debris question. However, the following sampling procedures should provide you with a representative sample:

1. Number the drums 1 through 71.

- 2. Using a Random Number generator or Table set to 71 select the first 8 numbers.
- 3. These numbers represent the drums to be sampled.
- Collect material from each drum in the ratio that they exist within the entire waste material. (e.g., soda ash 45%, silica 40%, bricks 15%).
- 5. Take this material and mix it together to form 1 composite sample.
- 6. Submit the sample for RCRA hazardous waste characteristic analysis: corrosive & TCLP metals.

Call with any questions.

David

1152 Junction Avenue - Schererville, Indiana 46375 1-219-322-0450 • 1-800-843-1835 Fax 1-219-322-0440

REPORT TO:

P.02

Ken Jacyk DuPont 5215 Kennedy Avenue East Chicago, IN 46312



9/09/93 Date:

7/21/93 Reed:

25-963 MO #:

Laboratory Smp 10 No.	* AB14783						·
PARAMETERS:	QC Value Obtained	QC True Value	Percent Recovery	Duplicate Analysis Result #1	Duplicate Analysis Result #2	Date Performed & Analyst	Sample Number of Duplicate
Flashpoint	. 83	84	98.8	115	110	DG_7/26	14799
% Alkalinity	0.0200	0.0202	99.0	0.057	0.065	DG 7/29	14834
♀ % Solids	94.61	92.55	102.2	90.00	90.04	TM 7/23	14783
Sulfide	200	200	100	<0.4	<0.4	DG 7/22	14738
Phenol	9.82		100.3	0.309	0.282	DG 7/27	14783
TOX	487	500	97.4			RM 7/27	
TCLP METALS							
Arsenic	0.050	0.050	100.9	0.156	0.150	PL 7/26	14783
ਜ਼ੂ Silver	0.019	0.014	136	0.002	0.002	PL 7/27	14783
Barium	0.130	0.141	92.2	<0.050	0.100	VT 7/23	14783
Cadmium	0.376	0.380	98.9	<0.002	<0.002	Pl 7/27	14738
Chromium	0.617	0.620	99.5	32.4	31.2	VT 7/26	14783
Mercury	1.648	2.000	82.4	<0.001	<0.001	RM 7/22	14673
Selenium	0.038	0.040	83.6	<0.010	<0.010	VT 7/26	14738
Selenium Lead	0.914	0.959	95.3	0.033	0.033	PL 7/27	14738
¬ [ cAminge	0.946	1.00	94.6	<0.024	<0.024	RM 7/22	14738
S NEC	9					$\wedge$	
DEC	1010999	VOI		/			

1152 Junction Avenue - Schererville, Indiana 48375 1-219-322-0450 • 1-800-843-1835 Fax 1-219-322-0440

REPORT TO:

P.03

Ken Jacyk

DuPont

5215 Kennedy Avenue

Bast Chicago, IN 46312



Date:

9/09/93

Recds

7/21/93

M ..

25-963

	AB14783		- <b></b>				ļ.
PARAHETERS:	QC Value Obtained	QC True Value	Percent Recovery	Duplicate Analysis Result #1	Duplicate Analysis Result #2	Date Performed & Analyst	Sample Number of Duplicat
2,4-Dinitrotoluene	1224	1425	85.9	1177	1224	SS 7/29	14783 *
2,4,6-Trichlorophenol	1225	1742	70.3	1225	1212	SS 7/29	14783 *
* Sample was spiked in q	uplicate						
Toluene-d8 (surrogate)	100 ppb	100 ppb	100				
4-BFB (surrogate) 1,1,1-Trichlor	41.2	55.3	74.5	123 ppb	122 ppb	GSGS 7/29	14634
Bromodichloromethane	22.3	29.3	76.2			·	
Carbon tetrachloride	72.9	69.6	105				
		<del></del>	<del>                                     </del>			. // //	<del></del>

#### 1152 Junction Avenue - Schererville, Indiana 46375 1-219-322-0450 • 1-800-843-1835 Fax 1-219-322-0440

REPORT TO:

Ken Jacyk
DuPont
5215 Kennedy Avenue
East Chicago, IN 46312

P.04



Pete:

9/09/93

Recds

100 d

			7		7	<del></del>	- <del></del>
Laboratory Smp 10 No.:	AB11934						<u> </u>
DESCRIPTION:> PARAMETERS:	QC Value Obtained	QC True Value	Percent Recovery	Duplicate Analysis Result #1	Duplicate Analysis Result #2	Date Performed & Analyst	Sample Number of Duplica
Pentachlorophenol				0.010	0.006	GS 3/22	11934
m-Cresol	2018	1940	104	ND	ND	GS 3/22	11934
Carbon Tetrachloride	106	100	106			6S 3/24	
Carbon Tetrachloride Benzene	90.2	100	90.2			GS 3/24	
Tetrachloroethane	96.4	100	96.4			GS 3/24	
Benzene				97666	93480	GS 3/24	12014
Toluene				94709	94865	GS 3/24	12014
Ethylbenzene				4690	5676	GS 3/24	12014
			· <u>·</u>				
	, *						
	*			1		7: 1	
DEC 00	10999	003		Certified by:	Calla	. Clus	

1152 Junction Avenue - Schererville, Indiana 46375 1-219-322-0450 • 1-800-643-1835 Fax 1-219-322-0440

SO REPORT TO:

Ken Jacyk
DuPont
5215 Kennedy Avenue
East Chicago, IN 46312



Dates

9/09/93

Recds

W #:

DESCRIPTION:> PARAMETERS:	QC Value Obtained	QC True Value	Percent Recovery	Duplicate Analysis Result #1	Duplicate Analysis Result #2	Date Performed & Analyst	Sample Number of Duplica
TCLP METALS							
Arsenic	0.046	0.050	92.7	0.327	0.151	DO 3/1	11934
Cadmium	0.115	0.113	101.8	0.007	0.005	DO 3/5	11934
Selenium	0.029	0.040	74.2	0.134	0.054	DO 3/18	11934
Silver	0.091	0.106	85.8	<0.002	<0.002	Do 3/5	11934
Mercury	0.412	0.500	82.4	28.4	23.8	DO 3/18	11771
Chromium	0.4488	0.500	97.6	28.4	23.8	DO 3/19	11934
Lead	01482	0.500	96.4	0.041	0.066	DO 3/19	11934
Barium	5.060	5.00	101.2	0.099	0.090	DO 3/19	11934
Cyanide	6.03	6.80	88.6	0.056	0.234	PL 3/19	11934
Phenol	9.0	9.78	92.0	0.356	0.364	PL 3/18	11683
Sulfide	220	200	110	<0.4	<0.4	DG 3/18	11780
Alkalinity	0.019	0.020	96.0	0.40	0.43	GS 3/28	12076
TOX	0.516	0.500	103.2	324	203	LL 3/22	11900
Flashpoint	84	84	100	110	110	DG 3/19	11974
% Solids	91.22	92.55	98.6	<0.01	<0.01	DG 3/17	11695
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This contract between us covers the work described herein.

Contractor agrees to furnish seven (2) model sixteen parts washers with clean solvent service and clean solvent service only to one DuPont owned unit at DuPont's East Chicago, Indiana Plant in accordance with DuPont's specifications dated 3/1/84 and any addends thereto, and Contractor's proposal dated 3/3/84, all of which documents are incorporated herein by reference. Contractor shall, except as otherwise expressly stated herein, furnish all labor, materials, tools, equipment, facilities and services, and do all things necessary to perform work specified herein.

#### COMPENSATION

Contractor's compensation will be on a Time and Material basis at rates established by Contractor's letter of 3/3/84 referred to as Exhibit "A", and becomes a part hereof.

#### TERMS

Net 15 days after completion and acceptance by DuPont, and receipt of release of liens and claims.

#### PERIOD OF AGREEMENT

4-1-84 AND SHALL EXTEND TO AND

This agreement shall become effective on right of contractor or DuPont to terminate this agreement as of the end of any calendar month prior to March 31, 1985 upon not less than thirty (30) days prior written sotice.

& INCLUDE 3-31-85 Subject to The

NO.356 P003 <sup>1</sup> 09/08/93 13:22 DUPONT EAST CHGO → 87741189 E. I. DU PONT DE NEMOURS & COMPANY' CONTRACT ORDER WILMINGTON, DELAWARE 19898 E. I. DU PONT DE NEMOURS & COMPANY Safety-Kleen . (Page 2 of 2) MEGUED BY

General 'Conditions

Contractor agrees that DuPont's general conditions EM-6680, attached hereto, are applicable to contractor's work hereunder. Any inconsistent terms or conditions submitted by contractor shall not apply unless they are (1) signed by both parties hereto, and (2) expressly referred to as being modifications of said general conditions. Contractor shall comply with DuPont's plant safety practices.

DOCUMENTS -

Involces, insurance certificates (expiration date 10/1/84), release of liens and claims shall be forwarded to C. R. Cassady at 5215 Kennedy Avenue, East chicago, Indiana 46312.

**ENTIRETY** 

This document and the attachments specifically referred to herein embody the entire contract covering the work to be performed hereunder, and there are no agreements, understandings, conditions, warranties, or representations, oral or written; express or implied, with reference to the subject matter bereof which are not merged berein. No modification hereof shall be of any force or effect unless covered by an order alteration issued by DuPont and accepted by contractor.

SUBJECT TO INDIANA 5% SALES TAX

DuPont Contract Administrator is C. Bailey "Not to Exceed" \$5,000.00.

APPROVED BY

ITEM	GEN LEDGER	SUB ACCOUNTS	REQUISITIONED BY	DELIVER TO	REQUISITION NO.
	7002	58298-S	C. Bailey		
			P. R. Johnston		
			C. A. Cremeans		

COPY 2 - LJ WILM, ACCT'S PAY,

LOCAL ACCT. SECT:

LC 001100002

≥ 09/08/93 13:22

March 1, 1984

#### SCOPE AND SPECIFICATION

#### SAFETY-KLEEN SOLVENT SERVICE

Contractor is to furnish all tools, materials, supplies, equipment and labor, not furnished by DuPont, necessary to provide Circulating Parts Cleaners and Solvent Service for DuPont's East Chicago, Indiana Plant as shown below:

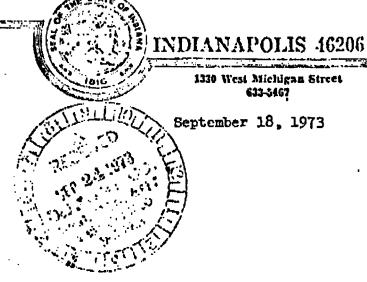
- Furnish parts washer at each of the seven locations listed below and provide solvent service as noted below:
  - Contact #3 Shop (Model #163-40695) Every 2 weeks.
  - Ag-Chem Shop (Model #163-65747) Every 4 weeks. b. 63295
  - Sulfamic Shop (Model #163-63325) Every 4 weeks.
  - Silicate Shop (Model #163-66625) Every 2 weeks.
  - Electrical Shop (Model #163-66617) Every 4 weeks. e.
  - Reagents Shop (Model #163-34342) Every 4 weeks.
  - Auto. Garage, Bldg. 110 (Model #170-24056) Every 4 weeks.
- Provide clean solvent service only every four weeks to one DuPont owned unit of approximately 50 gallons capacity located in our Pump Shop in Building #110. (Model #550-59474).



#### STREAM POLLUTION CONTROL BOARD

Mr. J. T. Sixsmith
Environmental Control Coordinator
E. I. duPont deNemours & Company
5215 Kennedy Avenue
P. O. Box 360
East Chicago, Indiana 46312

Dear Mr. Sixsmith:



#### Re: Wastewater Treatment

You are hereby notified that the Stream Pollution Control Board of the State of Indiana has, this 18th day of September, 1973, approved plans for modifying the F. I. duPont deNemours & Company wastewater treatment system at East Chicago. The proposed facilities are in accordance with the U. S. District Court Consent Decree of November 14, 1972.

The Company proposes consolidation of the nine existing outfalls into three outfalls to the Grand Calumet River. Storm sewers are to be separated from process sewers, and the existing process sewers combined in order to provide treatment including chemical addition, settling tanks, and sludge dewatering facilities. When completed, the plant will have three outfalls to the Grand Calumet that will include one noncontact cooling water discharge and two treated process water discharges. All other outfalls are to be removed and plugged.

Storm water piping will result in two severs that serve the office as well as the chloride production and warehouse areas. Each storm sewer will discharge to a 200-foot by 5-foot by 5-foot trench dug in a cinder filled absorption area north of the plant. Each of these porous fill areas will accept the 7,500-gpm of storm water resulting from a 5-inch per hour rainfall intensity during a ten minute time interval. The storm sewer from the silicate products area will discharge to the treatment system located near outfall 003.

All dirty water from steam generation, air compressors, etc., will be conveyed by way of a separate sewer that flows to the East Chicago municipal sewerage system. All sewage from employees presently discharges to the sewer system.

Outfall 001 will discharge only noncontact cooling water from the freen and acid manufacturing areas near the east end of the plant.

Mr. J. T. Sixsmith

September 18, 1973

Outfall 002 will convey treated wastewaters from the freon manufacturing, the sulfuric acid manufacturing, the sulfamic acid manufacturing and the agricultural chemical manufacturing areas. The treatment for all of these waste stream components are as follows:

A 2,200-gallon tank for collecting hydrofluoric acid, a 3,550-gallon waste caustic tank, a 35,000-gallon lime slurry tank, a 10,000-gallon contingency spill basin, a 1,500-gallon neutralization tank, a 46,000-gallon settling tank and three cartridge filter units are proposed for treatment of 1,400-gpm of acid wastewater. The combined effluent will have a final pH adjustment to be within the range of 6.5 to 9.0 prior to discharge. The discharge is to have continuous monitoring of pH, flow, temperature conductivity, as well as daily monitoring of 24-hour composite samples to provide values of suspended solids, dissolved solids, sulfates, chlorides, phosphorus, zinc and ammonia.

Outfall 003 will serve the chlorides and silicate products manufacturing area. Two 300,000-gallon equalization tanks, a rapid agitation coagulator, an 8,000-gallon flocculator, a 40,000-gallon thickener, two distomaceous earth coated rotary filters are proposed for the treatment of 390-gpm of wastewater. Wastewaters from this treatment system will also blend with the treated waters from the Ludox system prior to final pH adjustment and filtration through two 8-foot diameter by 16-foot height pressure sand filters to treat the proposed 600-gpm flow.

The Ludox wastewater treatment consisting of three 33,000-gallon capacity polyester tanks to collect waste acid, a 50-ton capacity lime storage and slurry unit, a 15,000-gallon crystalizer tank and a three foot diameter Eimco filter will treat 210-grm of wastewater before blending with other outfall 003 wastewaters. The 003 outfall is expected to have a maximum discharge flow of 600-gpm and will have similar monitoring equipment to that specified for 002.

The total plant will generate roughly 360,000 cubic feet of sludge per year consisting of essentially calcium sulfate, silicates, calcium hydroxide, and calcium fluoride. These sludges will be landfilled as dewatered material on a 7-acre site to the northeast of the plant (an area formerly used as a disposal site for calcium sulfate). The area will be filled as one acre diked segments containing a 6-foot depth of sludge that will be covered with earth. A clay and bentonite top and bottom layer will provide the required isolation for each cell of the sludge disposal area used for calcium fluoride sludges. The 7-acre plot is expected to handle 5 years accumulation of solid waste.

The Company expects the total net effluent to have the following characterist as required by November 14, 1972, Consent Decree:

pH - 6.5 to 9.0 zine - 8 pounds average

zine - 8 pounds average daily phosphorous - h pounds average daily

suspended solids - 600 pounds average daily chlorides - 2,500 pounds not daily

25014 004 ose monde not daily

- 12 pounds maximum per da

- 6 pounds maximum per de

- 900 pounds maximum per d - 4,800 pounds maximum per

- 58,500 pounds maximum pe

- 102 000 pounds maximum (

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January 31, 1977

Mr. J.T. Sixsmith Environmental Control Coordinator E. I. duPont deNemours & Company 5215 Kennedy Avenue, P.O. Box 360 East Chicago, Indiana 46312

Dear Mr. Sixsmith:

Industrial Waste Disposal Ro:

This will acknowledge receipt of your letter dated December 8, 1976, concerning your company's waste disposal. We wish to thank you for your prompt and complete response.

Our staff has reviewed the information submitted and determined your company is properly disposing of its waste materials. Your cooperation in this matter is greatly appreciated. If you should have any questions on waste disposal in the future, please contact our Solid Waste Management Section at AC 317/633-6400 for assistance.

Very truly yours,

Oral H. Hert Technical Secretary

JRB/sjk ec: Water Pollution Control. Enforcement Branch

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**INDIANAPOLIS** 

STATE BOARD OF HEALTH AN EQUAL OPPORTUNITY EMPLOYER

Address Reply to: Indiana State Board of Health 1330 West Michigan Street P. O. Box 1964 Indianapolis, IN 46206-1964

September 20, 1985

Mr. O. J. Meyer, Environmental Coordinator Dupont 5215 Kennedy Avenue East Chicago, IN 46312

Dear Mr. Meyer:

Re: Informational Request Calcium Sulfate Disposal

This will acknowledge our conversation via phone on September 13, 1985, regarding the proper disposal of calcium sulfate generated from a Dupont process. Per the conversation, it is my understanding that presently this waste material is being deposited upon property owned by Dupont. As was discussed, this practice is presently not approved and, consequently, is not in accordance with established law and regulations. Since the disposal on Dupont property is not approved, I must stipulate that the continued practice of disposing the calcium sulfate on unapproved property must discontinue. All future waste materials must be disposed of at an approved sanitary landfill as required by statute.

As was mentioned, one option that Dupont may consider for future disposal of this waste material, is the establishment of a landfill approved and properly permitted. Please find enclosed three handouts which provide the basic information for the development of a landfill application. The handouts are:

- 1. Application for construction/operating permit for solid waste management facilties.
- Rule 330 IAC 4, solid waste management permits.
- 3. Sanitary landfill model proposal.

In an effort to assist you I have marked each of these items in the upper right hand corner with an "A" that is circled which shall assist you in keeping the appropriate items together.

In an effort to assist you expediently in finding a disposal site either as an interim measure or long-term disposal option, I have also enclosed two handouts identifing the procedures to request a special

DEC 0011016

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waste approval for these materials to be landfilled in a permitted sanitary landfill. Those handouts are:

- 1. Special waste approval procedure.
- 2. Form I generator.

As I did on the other handouts, I have marked these two in the upper right hand corner with a "B" that is circled. Obviously, you will need some assistance for an interim disposal of the material until you can either make a decision as to what disposal practice you would like to pursue, and construct appropriately. Staff will be glad to work with you in identifing convenient disposal of the waste material in the State of Indiana. The quicker the special waste approval procedures and appropriate information could be gathered and submitted, staff can process and provide you with a fairly quick turn around time on the request.

If you have questions in the future regarding the special waste approval procedure, please feel free to contact Mr. George Oliver of this Branch at AC 317/243-5038. If you wish to discuss the landfill and its development and permitting process, please contact Mr. Stuart Miller at AC 317/243-5037.

More than likely, Mr. Miller or one of his staff members will be contacting you in the near future to coordinate an investigation of the property. However, if in the interim I can be of assistance, please contact me.

Very truly yours,

Dan B. Magoun, Chief

Solid Waste Management Branch

Division of Land Pollution Control

AC 317/243-5014

DBM/sk Enclosures

cc: Lake County Health Department



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



INDIANAPOLIS, 46225

105 South Meridian Street

August 27, 1986

90130

Mr. O. J. Meyer Environmental Coordinator E. I. DuPont de Nemours and Company 5215 Kennedy Avenue East Chicago, IN 46312

> Re: E. I. DuPont Lake County

Dear Mr. Meyer:

This letter concerns the letters and information that this office received from you on February 21, 1986, and May 5, 1986. Your letters contained information on a CaSO<sub>4</sub> sludge generated at your facility and a request for guidance on the permitting of the landfilling of the sludge.

As part of our review of the submitted information, it is desired to have a chemist from this office review the chemical testing methods and quality assurance. Unfortunately, due to a greatly increased demand for chemical reviews within our office, there is currently a backlog in this area. Therefore, there may be a delay in responding to your letters.

It is hoped that this delay will not provide any problems for your company. During the delay, this office will not pursue enforcement action for your continued landfilling of this material in violation of the permitting requirements of Regulation 330 IAC 4.

If you have any comments or questions, please contact Mr. Steven Reuter of this office at AC 317/232-3592.

Very truly yours.

Dan B. Magoun, Chief

Solid Waste Management Branch

Solid and Hazardous Waste Management

SPR/drc

cc: Lake County Health Department

Mr. Steve Schafer

Mr. Charles White

Mr. Duane Leith

Mr. Lewis Schoenberger

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DE 1 0011017

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AN EQUAL OPPORTUNITY EMPLOYER



#### INDIANAPOLIS

Address Reply to: Indiana State Board of Health 1330 West Michigan Street P.O. Box 1964 Indianapolis, IN 46206-1964

October 11, 1985

#### VIA CERTIFIED MAIL

Mr. Robert W. Porter, Plant Manager Chemicals and Pigments Department E. I. DuPont DeNemours and Company, Inc. 5215 Kennedy Avenue East Chicago, IN 46312

Dear Mr. Porter:

Re: Plant Disposal Site Lake County

This is written as a follow-up to our meeting of October 2, 1985. At that time, the following items were discussed and/or agreed upon:

- 1. This office will acknowledge the 1977 approval letter issued for the disposal of your wastes on plant property. However, we agreed that, based on current regulatory standards, your site should be brought under the appropriate program.
- You will further characterize your waste using recommended guidelines in the draft policy for foundry sand disposal sites. This will be done to determine what category your waste falls under, using this policy. Before sampling is initiated, you will send this office the constituents of the raw products and your proposal for additional testing. This will aid in tailoring a testing regime specifically suited to your waste. We will then respond with our recommendations, and sampling will commence. In any event, this sampling should be completed around January 1, 1986.
- 3. By October 1, 1986, you should either have the site properly permitted or have pending, in our office, a complete permit application for this disposal site. It was mentioned that under current landfill requirements, this site would most likely not qualify. The best avenue for operation would be the new alternate technology policy. This may be used as an interim policy upon Board approval prior to the promulgation of revised regulations.

0011018 001

DEC

4. Proper zoning was discussed and the 1/2 mile setback from plotted residential areas in Lake County raised. Part of the site may or may not be effected by this. Also, for the disposal site, proper zoning for a disposal operation must be obtained from the local zoning authority.

Please coordinate the sampling of the waste materials through Mr. George Oliver of the Special Projects Section. Also, if you have further questions, please do not hesitate to contact Mr. Stuart Miller of the Facility Inspection Section-North or me at AC 317/243-5148.

Very truly yours,

Dan B. Magoun, Chief

Solid Waste Management Branch
Division of Land Pollution Control

SCM/sk
cc: Mr. Steve Schafer

S.E

D. J. Willette, Pile: TAB 12.3

A

# Manual of Technology

July 28, 197

Mr. Dennis T. Maras, Director Department of Air Quality Control City Hall East Chicago, Indiana 46312

Dear Mr. Karas:

We request an open burning permit to dispose of a quantity of liquid organic waste at our East Chicago Plant. This weste is a by-product of an operation that is no longer located in East Chicago. We have stored this waste for about two years while trying to find another suitable method of disposal which would not create a more serious pollution problem. We have been unsuccessful in finding such a method and therefore have concluded that open burning is the only acceptable solution.

About 1000 drums, 55 gallen capacity, containing methyl ethyl ketone and an organic aludge will be disposed of. The burning will take place in small lots at our dump site on the east end of the plant. A hole will be dug and about 10 drums placed into the hole and the contents ignited. After burning, the drums will be inspected for completeness of combustion and the drums removed to scrap. The location of the burning site is such that it is not a hazard to buildings or equipment. The products of combustion are carbon dismide and water vapor. Burning will be scheduled only when the wind direction is favorable so that no highway or residential area is affected. We have tested this method and have found that the material burns with a clean flame with little or no dark smoke or particulate, and no cdor.

We request this permit for a period of one year but hope to complete disposal in two months.

J. T. Simomith Environmental Control Coordinator

E. I. du Pont de Nemours & Co. 5215 Kennedy Avenue East Chicago, Indiana 46312 398-2040

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#### EPARTMENT OF AIR QUALITY CONTROL / EAST CHICAGO

July 31, 1972

Mr. J. T. Sixsmith
Environmental Control Coordinator
E. I. DuPont De Nemours & Company, Inc.
5215 Kennedy Avenue
East Chicago, Indiana

Dear Mr. Sixswith:

This letter is in regard to your letter of July 28, 1972, which requests an open burning permit to dispose of a specific quantity of liquid organic waste.

Your letter guarantees no pollution problem and describes the specific method of burning.

On this basis, this office gives your company a conditional permit for the above stated operation.

Sincerely yours,

Dennis T. Karas, Director

Department of Air Quality Control

DTK:fs

.Manual of Technology



#### MATERIAL SAFETY DATA SHEET

RECEIVED

SECTION 1.

#### Product Identification

JUL 28 1993

LEGAL

Manufacturer: General Refractories Co.

Address: 600 Grant St., Room 3000, Pittsburgh, PA 15219

Main Telephone Number: 412-562-6000

Emergency Telephone Number: 216-847-9333

Product Name, Sales Name or Trade Name: RITEX A Product Type: Magnesite-Chromite Refractories

SECTION 2.

#### Hazardous Ingredients

Chemical	Common	CAS	Per	osha	ACGIH	Carcinogen (Y/N)*
Name	Name	Number	Cent**	Pel	TLV	
Ferro- chromite	(FeCr204)	12737-27-8	<13.0	(1)	(1)	No

Note: (1) Contains Cr(III) which is not listed as hazardous by NIOSH/ OSHA. ACGIH TLV for Cr(III) is 0.5  $mg/m^3$ . The main ingredient in this product is sinter MgO which is not hazardous.

\*Per NTP, IARC or OSHA lists. \*\*On Phase Basis. \*\*\*Total Basis.

SECTION 3.

### Physical Data

Appearance: Brown-black brick shape

Specific Gravity: 3.10-3.25

Boiling Point: NI

Evaporation Rate: NI

Solubility in Alcohol: Insoluble

Percent Volatile by Vol.: NI

Odor: Odorless

Melting Point: Over 2200°C Vapor Pressure: NI

Solubility in H2O: Insoluble

Other Solvents: Strong Acids

Vapor Density: NI

#### SECTION 4. Fire and Explosion Hazard Data

Flash Point (Method used): Nonflammable

Flammable Limits:

lel na

UEL NA

Extinguishing Media: NA

Special Fire Fighting Procedures: NA Unusual fire and Explosion Hazards: NA

Page 2

SECTION 5.

Health Hazard Data

Primary Routes

of Entry

Inhalation

Ingestion

Skin Contact and Absorption

Eyes

Other Potential Health Risks

Exposure Symptoms

Cough, impaired pulm. func. if exposed to dust

NE

Irritation

Irritation

NE

Emergency Procedures '

Move to fresh air.

Wash with water.

Flush with water.

SECTION 6.

Potential Exposure

When

Installation

Hazard Form

Dust generated during mixing.

Removal

Dust from tear-out after service.

SECTION 7.

Corrosivity and Reactivity Data

Stabliity: Stable

Incompatability (materials to avoid): None

Decomposition Products: None

Conditions to be Avoided: None

SECTION 8.

Disposal Procedures

Spill or Leak Procedures: Clean up like any solid material.

Waste Disposal Method: Approved landfill in accordance with all federal, state and local regulations.

#### Page 3

SECTION 9.

Personal Protective Equipment/Procedures

Respiratory Protection: Yes

Type: NIOSH/OSHA approved

dust mask.

Ventilation -- Local: Yes

Mechanical(General): During handling (cutting of brick

or discharging the bags).

Other: NA

Protective Gloves: Non-porous gloves

Eye Protection: Safety glasses

Other Equipment: Steel toe shoes

Action to be Taken During Repair and Maintenance of Equipment that has been in Contact with this Product: Use Recommended Safety Equipment.

SECTION 10.

Special Precautions

During Storage: None

Other: None

SECTION 11.

Preparation/Revision

Date: 9/16/85

NA=Not Applicable

NI=No Information or Test Data

NE=Not Established

IL532-0610

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	3	Generator's Name and Mailing Address E I Duront Denemours	& Co. Inc.						
		5215 Kennedy Ave. Cher	micals & Pign	ents Dept	: •				
-	1	East Chicago Indiana Generator's Phone (219 1977 -	463b <sup>2</sup>						
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	L	Leader Industries Inc	8.	US EPA ID Num	her	12			
	'	. Transporter 2 Company Name	<u>L</u> :			20-144			
	1	Designated Facility Name and Site Address	10.	US EPA ID Nurt	ber				
		138th & I-94							
		Calumet City, Illinois	60409					THE VICE TO	
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#### STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

2200 CHURCHILL ROAD, SPRINGFIELD, 2LINOIS 62706 (217) 782-6761

8.532-0610

LPC 62 8/81

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	1 L	7. Transporter 2 Company Name	8.		PA ID N				7 - 55 - 12 - 13 - 13 - 13 - 13 - 13 - 13 - 13	Trim, E			
		9, Designated Facility Name and Site Address		US E	PA ID N		' '	2	. Zimae		15. B	T 427	
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	П	138th & I-94 Calumet City, Illinois	60409   1										
		11. US DOT Description (Including Proper Sh		ess, enc	ID Nui	nber)	12.Cont	ainers	13. Total	14. Unit	THE STATE OF	្តីដូច្ន	::S:
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1		J. Additional Descriptions for Materials Listed	Above	·····				K. Har	ndling Codes fo	r Wastes	Listed	Abov	PET C
		15. Special Handling Instructions and Addition  16. GENERATOR'S CERTIFICATION: I here above by proper shipping name and are	by declare that the control	ents of the	nis cons	ignmen and an	nt are tully	and ac	in proper condi	bed ition	Fig. 11	22001	
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l	T	17. Transporter 1 Acknowledgement of Reco	eipt of Materials	/		7		· · · · ·				Date	
ı	AN	Printed/Typed Name Jim Ferguson		Signatur	T 1	1	1 4 4	eor			Month 7	Day 30	Ye 8
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		20. Facility Owner or Operator: Certification item 19.	of receipt of hexardous	materia	als cove	ared by	this ma	nifest e	except as note	d in			
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2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706 (217) 782-6761

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ride the information may result in a civil post pures. This form has been supproved by GENERATOR COPY - PART 6

, LPC 62 8/81 .

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2200 CHURCHILL ROAD, SPRINGMELD. ILLINOIS 52706 (217) 782-6761

£532-0610 LPC 62 8/81

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	esignated Facility Name and Site Address ID Jamefill Sech & I-94 wlumet City, Illimais		US EPA 1D N	umber				
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## EADER

## MANIFEST

No	14127
10.	

## NDUSTRIES, INC.

9000 Dombey Rd. Portuge. Indiana 48368 216/765-8508

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EMERGENCY CHEMICAL ASSISTANCE NO 219-762-8588

	al River	
,	6/10/1	DATE 5/1/81
	**************************************	DO SONI CODE
	WASTE CHARACTERIZATION	CONTRACTOR'S CODE
t.	LOCATION EAST CHICAGO PLANT	EA CODES
	EA I.D. 1 TND 005174354	GTHER CODES
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TRAC	E COMMONENTS NOT LISTED ABOVE	
<u> </u>		
IV.	PETSICAL STATE & 25°F (CIRCLE): (SOLID) LIQUID SLOW	OCE LIQUID/SOLID PHASES GAS
	OTEES	· -
	SOLIDS : IS THERE A DUSTING MAZARD IF COM	STAINERS ARE OPENED? NO.
	LIQUIDS & STUDGES : CAN THE WASTE BE PUMPED?	
	LIQUID/SOLID PRASES: I FEET FLOWING LIQUID LATER	
	CASTS : PRESSURE OF CONTAINER	PSIG
₹.	• • • • • • • • • • • • • • • • • • • •	ETTES (CIRCLE)
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	Olara Office	
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3. SIDURON

A. TRACE COMPONENTS NOT

GEER 40 GAL APPEDI. WI. PER VII. D.O.I. SEIFFING NAME NOT KEGULATED D.O.T. BAZZED GLASSIFICATION NOW - HAZARDOUS II. PEWARKS VIII. VOLUME (FOR PLANNING PURPOSES CHIE) THIS REQUESTY 5000 LBS. Tev. 11/20 DUPONT EAST CHGO + 302 773 5176 61:01 26/60/60

MAY 9 1984 8119 DU PONT CODE WASTE CHARACTERIZATION CENTRACTOR'S CODE I. LOCATION EAST CHICAGO PLANT ವಾಗಿ ಭಾಮ ರ್ಷಕ್ಕ ಯಾಟ SOLU) PARTICULATE II. NAME OF WASTE FLOOR SWEEPINGS MATERIAL FROM CLEANING FLOORS) III. CREOSITION C. ONE TIME OR D. CONCENTRATION RANGE I TIPICAL ANALTSIS "FLOOR SLEEP" (COMMERCIAL CONDUM) 95 IO 1. TALCE COMPONENTS NOT LISTED ABOVE IV. PHISICAL STATE & 15°F (CERCLE): (SOLID) LIQUID SLUDGE LIQUID/SOLID PHASES GAS OTEER SOLIDS : IS THERE A DUSTING BAZARD IF CONTAINERS ARE OPENED! K.O.O. LIQUIDS & SLUDGES : CAN THE WASTE BE PROPER! 2002FD? LICUTED/SOLID PEASES: I FREE FLOWING LIQUID LAYER . (VOLUME I) CASES . : PRESSURE OF CONTAINER ?**5**1¢ T. CONTAINMENT (CIRCLE) VI. PROPERTIES (CURCLE) CEMEUSTIELE (FF\_ 07) IGNILABLE (FF SULX (ದ್ಯಾಪ್ ದಾ) (ದ್ಯಾಪ್ ಧಾ) 55-GAL, STEET, DREMS (DOT CURROSIVE NO OSEA CARCINOCES NO 30-GAL. FIRER DRING (DOT ODOR (TES/NO)YET, SUGA S-GAY PATTS REACTIVE of 40 GAL FIBER PACK PROMS NO TOXIC MANUEL 125 135. VII. D.O.I. SELTETTE NAME NOT REGULATED B.O.I. SAZIED CLASSIFICATION KION MAZAR DOUS VIII. VOLIME (FOR FLANNING PERPOSES CHIT) ELS 180011 \$ 5000 4 135

PECIAL WASTE ANALYSIS REPORT

AROBATORY:

Chemical Waste Management

84008119 PROF: HQUA46051 E I DUPONT DE NEMOURS & CO

E CHICAGO, IN

DITCE:			
FLOOR	SWEE	PTNG	:

PROFILE SHEET RECEIVED ON:		
DERTIFICATE OF REP. SAMPLE RECEIVED:	n/a	SAMPLE TAKEN:
PROPOSED TREATMENT/DISPOSAL FACILITY:	CID II	

THE ANALYSES BELOW REPORTED WERE SELECTED BY ME, BASED UPON THE GENERATOR'S REPRESENTATIONS IN THE PROFILE SHEET AND ANY APPLICABLE WASTE ANALYSIS PLAN ESTAB-LISHED BY THE PROPOSED FACILITY FOR WASTE OF THIS TYPE. ANALYSES REQUIRED BY A WASTE ANALYSIS PLAN ARE INDICATED BY AN ASTERISK ( + )

DATE OF ANALYSIS: .

Yest	As Received	Lechale	Analyst Initials	Test	As Received	Leachate	Analyst Initials
Specific Gravity	1,000						
on 10%. Solution	6.7						
Acidity. 4 at							
Alkalinity, % as				Phenois, mg/l	45		
C O D. mg/l				Cyanides, as CN, Total, mg/l	20		
B O Ds. mg/l				Cyanides, as CN, Free, mg/l			
Total Solids @ 105°C	98.197.						
Total Dissolved Solids, mg/l				Nitrogen, Ammonia. as N. mg/l			I
Total Suspended Solids, mg/l				Nitrogen, Organic, as N, mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen, as N. mg/l			L
Flash Point, F*	>212			Total Alkalinity (P), as CaCOs, mg/l			
Ash Content, on ignition	17.673			Total Alkalinity (M), as CaCOs, mg/l			
feeting Yaive. BTU/Ib			1	Total Hardness, as CaCO <sub>3</sub> , mg/l	Ī		
"Acid Scrub." gNaOH/g	1		1	Calcium Hardness, as CaCOs, mg/l	I		
				Magnesium Hardness, as CaCO <sub>3</sub> , mg/l			
Arsenic, as AS, mg/l	0.5%						1
Berium, as Ba. mg/l	12.6		1				
Soron. as Bi, mg/l	1777		<b>†</b>	Oil and Grease, mg/l			1
Cadmium, as Cq, mg/l	0.48		<u> </u>			1	1
Chromium, Total as Cr. mg/l	4.83		1	***		-	
Hexevelent Chromium @ Cr. mg/l	1	<del></del>	<u> </u>	Aldrin, mg/l		<del>                                     </del>	1
Copper. as Cu. mg/l	10.10			Chlordene, mg/l			
Iron, Total as Fe. mg/l	1810.			DOT's, mg/l		†	1
Iron, dissolved, as Fe. mg/l	1 1111111			Dieldrin, mg/l	1	1	1
Lead, as Pb, mg/i	499	3001	<del>                                     </del>	Endrin, mg/l		<0.01	<del>                                     </del>
Mangenese, 85 Mn, rag/f		- X C-4	<del>                                     </del>	Heptachior, mg/l		1 12:22	-
Magnesium, en Mg, mg/I	<del>                                     </del>	<del></del>		Lindane, mg/l		30.01	
Mercury, as Hg, mg/l	0.0531		<del>                                     </del>	Methoxychlar, mg/l	1	10.01	
Nickel, at Ni, mg/l	11.54		-	Texaphene, mg/l		30.05	
Seienrum, as St., mg/l	17000		<del> </del>	Parethion, mg/l		1-3//11/	9
Silver, as Ag, mg/l	RAIS		<del> </del>	2, 4, D, mg/l	<del>                                     </del>	50,1	1
Zinc, as Zn, mg/l	524		<del>†                                     </del>	2. 4, 5, TP (Silvex), mg/l	<del>                                     </del>	₹0.01	†
	1-2-2-7			PC8's, mg/l	45.0	30.0	+
			<del>                                     </del>		1 3.0	<del>                                     </del>	<del> </del>
Bicarbonates, as HCO1, mg/l	1	<del>                                     </del>			1	1	1
Carponetes, as COs. mg/l	<b>†</b>		1	<del> </del>	t	†	1
Chlorides, as Ct, mg/l	1		1		<del>                                     </del>	1	<del> </del>
Fluorides, as F, mg/l	1	<b> </b>	<del> </del>		<del>                                     </del>	1	1
Nitrate, as NO <sub>2</sub> , mg/l	<del>                                     </del>	<del> </del>	<del> </del>		<del>                                     </del>	<del> </del>	<del>                                     </del>
Nitrite, as NOs. mg/l	1		<del>                                     </del>	<del> </del>	<del>                                     </del>	<del> </del>	<del> </del>
Phosphate, as P, mg/l	<del> </del>	<del> </del>	<del> </del>		<del>}</del>	<del> </del>	1
Sulfate, as SO4 mg/l	<del>1</del>	<del> </del>	<del>                                     </del>	<del> </del>	<del>                                       </del>	<del>                                     </del>	+
sulfides. as S. mg/I DISSULVE	<del></del>		1		<del></del>	1	<u> </u>

FORM WAILER (RAW, 11-6-40) Tan, dry, fine granular sies WASTE MANAGEMENT, INC SOLICE. NO ODOR.

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This report has been prepared for the exclusive use and benefit of Chemical Waste Management ... No representation concerning sample validity or analytical accuracy or completeness is hereby made to any other person receiving this report.



#### Chemical Waste Management, Inc.

Technical Center 150 W. 137th Street Riverdale, Illinois 60627 312/841-8360

April 9, 1984

Mr. Jim Dowd E.I. DuPont De Nemours 5215 Kennedy Ave. East Chicago, IN. 46312

DEAR CUSTOMER:

This is a reminder to examine your records for Special Waste Disposal Permits issued by the Illinois E.P.A. which are going to expire during the month of AUGUST 19 84. If you wish to have the permit(s) listed below renewed, please submit a one (1) quart sample of the waste material, along with a contact report and your "Waste Characterization Sheet" to our Chemical Waste Yanagament Laboratory located at 138th Street and Calumet Expressway, Calumet City, Il. 60409.

			LANDFILL	W.P.S.
PERMIT #	EXPIRATION DATE	WASTE NAME	SITE	NUMBER
801245	8/20/84	Floor Sweepings	CID II	HOU-46051

Chemical Waste Management will apply for the renewal of the permit(s) with the I.E.P.A. in your behalf. There is no cost to your company for our verification analysis or the permit application.

Thank you for your kind attention and cooperation in this matter. If you have any questions, please feel free to contact me.

Sincerely,

Chemical Waste Management

Shirley Koegel Laboratory Services

SK

Encl: Contact Report Form

cc: Tom Eggers, CWM - Texas
Robert DeStegano, DuPont-Deleware

your forms to PRJ to angent + sevol 5/3

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NO.373 P015



17/782-6767

FPTEMBER 15, 1984 PPLICATION RECEIVEDS, 06722/84 ERMIT NUMBER 101245-031600030

ERMET ISSUED TO

AND THE PARTY

CID CORPORATION
P.B. NOX LINE
TALUMET CITY

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MASTE STREAM NUMBER PERMIT EXPIRES:

> MASTE MANAGEMENT OF ILLINDIS SOUS BUTTERFIELD ROAD

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المشتر بالمراجة والمناسينيون HASTE NAMES A FLOOR BREEPINGS

MASTE CLASSIFICATIONS CHON-HAZARDOUS WIT SUBJECT TO FEE

PERMIT TO RECEIVE THE INDICATED WASTE IN GRANTED.

THIS PERMIT TE GRANTED SUBJECT TO THE ATTACHED STANDARD CONDITIONS.

OTSPOSAL STIEF ET DE

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SRISTTION OF MOTES

BULK WASTE (SOLTO, LIQUID, POWOEK, OR SLUNGE) TIXED WITH DAILY PECELPIT OF REFUSE ABOVE TEODISMUSAC)

ATTENTEDNES OF THE STATE OF THE HASTE GENERATORS - ET PUMBHE DE HE MOURS 243 KENNETT XVENUE

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DEC 6011112



# Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

217/782-5762 84808 17, 1984 2497E STOEKS REBOAT WURDER: 401245 EYPTRES: 08/20/84

SITE OF E: CHIC/GO/CID H2

W1TE #: 03150030

CID CORRORATION P.STE MEAT OF IL P.O. SOX 1396 INC. 137TH ST CALUMET CITY , IL 60400 REVEROALE , IL 60627

YOUR AUTHORIZATION TO ACCEPT 10,000 GALLONS OF FLUOR 5. EPTIMES FRO E 1 OUPDAT TE ME OUR 91878900288 IN DUE TO EXPINE AUGUST 20, 1944.

THE CURPERT LISPOSALYTISATHERY RETAIN IS: BUL: PRATE (ACLID: LIBDID: POWNER: THE SLUTGE) WITHOUTH DAILY RECEIPT TE REFUSE THE GARNE (CODISPOSAL)

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IF THERE ARE OF CHARGES IN CASTE CLASSIFICATION OF HAZARDOUS/NO HYAZARDOUS, ASTE CHAR CIPPISTICS, SE REATING PROCESSES DW GR EMIC MARTE MARE AND YOU MESS OF THE CHARGEST AND THE PROCESSES DW GR EMIC MARTE MARE AND YOU MESS OF THE ARTEST STREAM FER IT DESIGNATED OF THE MESSES AND INTERPOSAL MESSES IN ACCOURD OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL MESSES AND IT OF THE MESSES AND INTERPOSAL M

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NO.373 P004



LEGAL Wilmington, Delaware 19898



July 29, 1993

VASTE MANAGEMENT DIV EPA, REGION

**OVERNIGHT MAIL** 

Rojer Field, Esq.
Office of Regional Counsel
U.S. EPA Region V
111 W. Jackson St.
Chicago, Ill 60604-3590

Re: RCRA §3007 Information Request/ E. I. du Pont - East Chicago Plant

Dear Mr. Field:

I would like to confirm our telephone conversation of Monday, July 26, 1993, at which time DuPont was granted an extension to file its response to the RCRA §3007 Information Request for the East Chicago plant until September 10, 1993.

Thank you for your cooperation in this matter.

Sincerely,

Robyn G. Magee

00'

Thad Slaughter FPA Region V

HRE-8J

# JUL 08 1993 <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

C.T. Corporation System
Registered Agent for
E.I. DuPont-East Chicago Plant
1 North Capital Avenue
Indianapolis, Indiana 46204

Re: RCRA §3007 Information Request E.I. Dupont-East Chicago Plant

#### Dear Sir or Madam:

The United States Environmental Protection Agency (U.S. EPA) has completed a review of your January 28, 1993, response to U.S. EPA's October 1, 1992, "Request for Supplemental Information" pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Section 3007 of the Resource Conservation and Recovery Act (RCRA) concerning the E.I. Dupont-East Chicago Plant facility located in East Chicago, Indiana. Your response requires further supplemental information. Therefore, pursuant to the authority of Section 3007 of the RCRA, 42 U.S.C. \$6927, as amended, you are requested to provide additional information concerning the following numbered documents provided in the January 28, 1993, response as follows. Terms defined in the previous "Request for Supplemental Information" shall have the same meaning herein.

- A. In reference to documents DEC0010005, page 011, DEC0010010, page 110, and DEC 0010926, please provide:
  - (i) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the flue dust from the "Ludox" process, since 1980;
  - (ii) a detailed description of any and all of the locations the flue dust was stored, treated, or disposed;
  - (iii) date(s) of shipment and the name and address of any person or place to whom any of the waste or treated waste was shipped;

- (iv) a detailed explanation of the sampling strategy used in collecting samples for any chemical or physical analyses for the waste stream;
- (v) <u>all</u> quality assurance/quality control validation data packages for the analytical information to support the analytical data provided in response to this question; and
- (vi) dates and amounts of flue dust generated at the facility.

- B. How did the facility manage spent solvents after 1980? The facility indicated that before August 1980, it disposed of the spent solvents by placing the waste on the ground, including 1,1,1-trichloroethane (see documents DEC 0010035, DEC 0010926, and DEC 00110046). Provide copies of all documents relating to your response to this question.
- C. Information on document DEC 0010927, page 004, indicates that the chrome pit is an extension of the HCL neutralizing pit. Describe what is meant by "extension". Provide copies of all documents relating to your response to this question.
- D. Information on document DEC 0010927, page 004, indicates that the HCL neutralizing pit was filled with "rubble". Provide information on referenced material that describes the source, chemical and physical nature of the waste, and amount of the material disposed in the pit. Provide copies of all documents relating to your response to this question.
- E. Information on document DEC 0010927, page 014, describes operations relating to waste produced in the sulfamic process. In relation to this document, please provide a description of the waste sludges and tank material that includes:
  - (i) the source of waste;
  - (ii) the chemical and physical nature of waste;
  - (iii) amount of the material treated or disposed of in the pit;
  - (iv) the time these activities occurred at the facility; and
  - (v) the area the treated sludges from the pit were landfilled at the facility.

Provide copies of all documents relating to your response to this question. In addition, why did DuPont determine that the practice of landfilling the sludges from the pit was "not really permitted"?

١,

- F. Information on document DEC 0010927, page 001, describes operations relating to the burning of Ag waste at the site. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste;
  - (ii) the time these activities occurred at the facility; and
  - (iii) the area where the burning occurred.

- G. Information on document DEC 0010927, page 008, indicates that there is a reference to Ag chemical liquid waste which is evidently being incinerated off-site. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste;
  - (ii) the storage place, method, and time material waste was stored at the facility; and
  - (iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the waste.

Provide copies of all documents relating to your response to this question.

- H. Information on document DEC 0010927, page 008, indicates that there is a reference to wash water stored in rail cars near the toluene-containing rail cars. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste;
  - (ii) the storage place, method, and time material waste was stored at the facility; and
  - (iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the waste.

Provide copies of all documents relating to your response to this question.

- I. Information on documents DEC 0010323, pages 001-003, DEC 0010158, page 001, and DEC 0010331, page 001, pertains to the generation of "chequer flue dust" wastes. If the waste is identical to the waste identified in question A, please acknowledge this fact, and disregard the following questions. If not, provide the following information:
  - (i) dates of generation and amounts of the waste generated;
  - (ii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, chemical analyses, analytical results, manifests, or any other document containing chemical or physical data about the "chequer flue dust" referenced in document DEC 0010323 page 1, since 1980;
  - (iii) a detailed description of any and all of the locations the flue dust was stored, treated, or disposed;
  - (iv) date(s) of shipment and the name and address of any person or place to whom any of the waste or treated waste was shipped;
  - (v) a detailed explanation of the sampling strategy used in collecting samples for any chemical or physical analyses for the waste stream; and
  - (vi) <u>all</u> quality assurance/quality control validation data packages for the analytical information to support the analytical data provided in response to this question.

- J. Document DEC 0010323, page 001, indicates that chromium containing bricks will be replaced. With respect to chromium-containing bricks, please provide:
  - (i) any documents related to the activities associated with the generation, storage, treatment, and disposal of the hazardous and/or nonhazardous chromium-containing bricks at and from the facility; and
  - (ii) a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment, and disposal of hazardous and/or nonhazardous chromium containing bricks at and from the Facility.

Provide copies of all documents relating to your response to this question.

K. Information in document DEC 0010010 pertains to the shipment of a waste to the CID landfill. Provide any documents related to the

activities associated with the generation, storage, treatment, and disposal of the waste referenced in document DEC 0010010. Provide a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment, and disposal of nonhazardous waste referenced in document DEC 0010010.

L. Provide the following certification: I certify under the penalty of the law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Such information must be furnished to this office within twenty (20) days of receipt of this letter, notwithstanding its possible characterization as confidential. In that regard you may, under 40 CFR §2.203(a), assert a business confidentiality claim covering all or part of the information provided in the manner described in 40 CFR §2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Dotes B. Any request for confidentiality must be made when the information is submitted to U.S. EPA, since any information not so identified may be made available to the public without further notice to you.

The written statements provided pursuant to this Information Request must be notarized and submitted under an authorized signature certifying that all matters contained therein are true and accurate to the best of the signatory's knowledge and belief. Any documents submitted to U.S. EPA pursuant to this information request should be certified as true and authentic to the best of the signatory's knowledge or belief.

Compliance with this Information Request set forth herein is mandatory. Failure to respond fully and truthfully to the Information Request within twenty (20) days of the receipt of this letter or adequately justify such failure to respond can result in enforcement action by U.S. EPA pursuant to Section 3008 of RCRA.

Should the signatory find, at any time after the submittal of requested information, that any portion of the submitted information is false, the signatory should so notify U.S. EPA. If any answer certified as true should be found to be untrue or misleading, such is subject to prosecution pursuant to 18 U.S.C. §1001 or §3008(d) of RCRA. U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

This Information Request is not subject to the approval requirements of the Paperwork Act of 1980, 44 U.S.C. Section 3501, et seq. If you have any questions regarding this matter, please contact Thad Slaughter, of my staff, at (312) 886-4460. Your response should be sent to the United States Environmental Protection Agency, Region V, Attention: Thad Slaughter, RCRA Enforcement Branch (HRE-8J), 77 West Jackson Boulevard, Chicago, Illinois 60604.

Sincerely yours,

# ORIGINAL SIGNED BY JOSEPH M. BOYLE

Joseph M. Boyle, Chief RCRA Enforcement Branch

cc: Thomas Linson, IDEM

Steven A. Coppula, E.I. DuPont

bcc: Roger Field, CS-3T

HRE-8J:TSLAUGHTER:be:04/30/93:Filename:2INFINEI

OFFICIAL FILE COPY

	CONCURRENCE REQUESTED FROM REB			
	OTHER	REB	REB	REB
	STAFF	STAFF	SECTION	BRANCH
i	<u></u>		CHIEF	CHIEF
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	2/93	7-29	734	7/1/93



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

THE 0 8 1993

HRE-8J

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

C.T. Corporation System
Registered Agent for
E.I. DuPont-East Chicago Plant
1 North Capital Avenue
Indianapolis, Indiana 46204

Re: RCRA \$3007 Information Request E.I. Dupont-East Chicago Plant

Dear Sir or Madam:

The United States Environmental Protection Agency (U.S. EPA) has completed a review of your January 28, 1993, response to U.S. EPA's October 1, 1992, "Request for Supplemental Information" pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Section 3007 of the Resource Conservation and Recovery Act (RCRA) concerning the E.I. Dupont-East Chicago Plant facility located in East Chicago, Indiana. Your response requires further supplemental information. Therefore, pursuant to the authority of Section 3007 of the RCRA, 42 U.S.C. §6927, as amended, you are requested to provide additional information concerning the following numbered documents provided in the January 28, 1993, response as follows. Terms defined in the previous "Request for Supplemental Information" shall have the same meaning herein.

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  - (ii) a detailed description of any and all of the locations the flue dust was stored, treated, or disposed;
  - (iii) date(s) of shipment and the name and address of any person or place to whom any of the waste or treated waste was shipped;

- (iv) a detailed explanation of the sampling strategy used in collecting samples for any chemical or physical analyses for the waste stream;
- (v) <u>all</u> quality assurance/quality control validation data packages for the analytical information to support the analytical data provided in response to this question; and
- (vi) dates and amounts of flue dust generated at the facility.

- B. How did the facility manage spent solvents after 1980? The facility indicated that before August 1980, it disposed of the spent solvents by placing the waste on the ground, including 1,1,1-trichloroethane (see documents DEC 0010035, DEC 0010926, and DEC 00110046). Provide copies of all documents relating to your response to this question.
- C. Information on document DEC 0010927, page 004, indicates that the chrome pit is an extension of the HCL neutralizing pit. Describe what is meant by "extension". Provide copies of all documents relating to your response to this question.
- D. Information on document DEC 0010927, page 004, indicates that the HCL neutralizing pit was filled with "rubble". Provide information on referenced material that describes the source, chemical and physical nature of the waste, and amount of the material disposed in the pit. Provide copies of all documents relating to your response to this question.
- E. Information on document DEC 0010927, page 014, describes operations relating to waste produced in the sulfamic process. In relation to this document, please provide a description of the waste sludges and tank material that includes:
  - (i) the source of waste:
  - (ii) the chemical and physical nature of waste:
  - (iii) amount of the material treated or disposed of in the pit;
  - (iv) the time these activities occurred at the facility; and
  - (v) the area the treated sludges from the pit were landfilled at the facility.

Provide copies of all documents relating to your response to this question. In addition, why did DuPont determine that the practice of landfilling the sludges from the pit was "not really permitted"?

- F. Information on document DEC 0010927, page 001, describes operations relating to the burning of Ag waste at the site. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste;
  - (ii) the time these activities occurred at the facility; and
  - (iii) the area where the burning occurred.

- G. Information on document DEC 0010927, page 008, indicates that there is a reference to Ag chemical liquid waste which is evidently being incinerated off-site. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste;
  - (ii) the storage place, method, and time material waste was stored at the facility; and
  - (iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the waste.

Provide copies of all documents relating to your response to this question.

- H. Information on document DEC 0010927, page 008, indicates that there is a reference to wash water stored in rail cars near the toluene-containing rail cars. In relation to this document, please provide the following:
  - (i) the chemical and physical nature of waste:
  - (ii) the storage place, method, and time material waste was stored at the facility; and
  - (iii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, analyses, analytical results, manifests, or any other document containing chemical or physical data about the waste.

Provide copies of all documents relating to your response to this question.

- I. Information on documents DEC 0010323, pages 001-003, DEC 0010158, page 001, and DEC 0010331, page 001, pertains to the generation of "chequer flue dust" wastes. If the waste is identical to the waste identified in question A, please acknowledge this fact, and disregard the following questions. If not, provide the following information:
  - (i) dates of generation and amounts of the waste generated;
  - (ii) copies of the Toxicity Characteristic Leaching Procedure test results, Extraction Procedure test results, chemical analyses, analytical results, manifests, or any other document containing chemical or physical data about the "chequer flue dust" referenced in document DEC 0010323 page 1, since 1980;
  - (iii) a detailed description of any and all of the locations the flue dust was stored, treated, or disposed;
  - (iv) date(s) of shipment and the name and address of any person or place to whom any of the waste or treated waste was shipped;
  - (v) a detailed explanation of the sampling strategy used in collecting samples for any chemical or physical analyses for the waste stream; and
  - (vi) <u>all</u> quality assurance/quality control validation data packages for the analytical information to support the analytical data provided in response to this question.

- J. Document DEC 0010323, page 001, indicates that chromium containing bricks will be replaced. With respect to chromium-containing bricks, please provide:
  - (i) any documents related to the activities associated with the generation, storage, treatment, and disposal of the hazardous and/or nonhazardous chromium-containing bricks at and from the facility; and
  - (ii) a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment, and disposal of hazardous and/or nonhazardous chromium containing bricks at and from the Facility.

Provide copies of all documents relating to your response to this question.

K. Information in document DEC 0010010 pertains to the shipment of a waste to the CID landfill. Provide any documents related to the

activities associated with the generation, storage, treatment, and disposal of the waste referenced in document DEC 0010010. Provide a copy of all documents which relate to the subsequent disposition of all residues, contaminated water, or other debris resulting from the generation, storage, treatment, and disposal of nonhazardous waste referenced in document DEC 0010010.

L. Provide the following certification: I certify under the penalty of the law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Such information must be furnished to this office within twenty (20) days of receipt of this letter, notwithstanding its possible characterization as confidential. In that regard you may, under 40 CFR §2.203(a), assert a business confidentiality claim covering all or part of the information provided in the manner described in 40 CFR §2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Dotes B. Any request for confidentiality must be made when the information is submitted to U.S. EPA, since any information not so identified may be made available to the public without further notice to you.

The written statements provided pursuant to this Information Request must be notarized and submitted under an authorized signature certifying that all matters contained therein are true and accurate to the best of the signatory's knowledge and belief. Any documents submitted to U.S. EPA pursuant to this information request should be certified as true and authentic to the best of the signatory's knowledge or belief.

Compliance with this Information Request set forth herein is mandatory. Failure to respond fully and truthfully to the Information Request within twenty (20) days of the receipt of this letter or adequately justify such failure to respond can result in enforcement action by U.S. EPA pursuant to Section 3008 of RCRA.

Should the signatory find, at any time after the submittal of requested information, that any portion of the submitted information is false, the signatory should so notify U.S. EPA. If any answer certified as true should be found to be untrue or misleading, such is subject to prosecution pursuant to 18 U.S.C. §1001 or §3008(d) of RCRA. U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

This Information Request is not subject to the approval requirements of the Paperwork Act of 1980, 44 U.S.C. Section 3501, et seq. If you have any questions regarding this matter, please contact Thad Slaughter, of my staff, at (312) 886-4460. Your response should be sent to the United States Environmental Protection Agency, Region V, Attention: Thad Slaughter, RCRA Enforcement Branch (HRE-8J), 77 West Jackson Boulevard, Chicago, Illinois 60604.

Sincerely yours,

Joseph M. Boyle, Chief RCRA Enforcement Branch

cc: Thomas Linson, IDEM

Steven A. Coppula, E.I. DuPont

Thad,

- 1. The earlier info. request was under both Sec. 104 of Superfund and RCRA (although it was not signed by the proper RCRA delegee). Therefore, I have made some changes to the intro. to make this a more straight-foward RCRA 3007.
- 2. All your questions were good and complete. I made some editorial changes, primarily to break down the compound questions into separate points. If this is confusing, let's discuss.
- 3. Please consider whether we should ask any questions The foliang
- a) The Part A identifies two drum storage areas (A and B) and two tank areas (acid and solvent). You ask generally about solvent management, but do we want to ask specifically about each of these:
- 1) the dates on which haz. was. was stored there.
- 2) the type of waste
- 3) how the waste was disposed of
- 4) whether units were closed
- 5) any regulatory action taken with respect to each unit.
  - b) concerning DEC 0010927
- 1) On page 1, there is a reference to Ag wastes being burned in the field. Do we want to ask what waste was burned, and when?
- 2) Page 4, there is a reference to PCB storage. There are TSCA regs. governing storage for disposal of PCB (761.65). Should we ask: what was stored, what levels of PCB and what happened to the items being stored.
- 3) Page 8, there is a reference to Ag Chem liquid waste. Should we ask what was being stored, where, for how long and what happened to it. Note that in the in Dupont's Phase I groundwater assessment (Feb. 1990), it is reprted on 3-4 that "Since 1984, AgChem waste have not been stored in drums but in rail cars, and the areas is considered to be closed."
- 4) Page 8. On bottom of page, there is reference to haz. waste which is evidently being incinerated off-site. Shall we ask: what it is, how long it is stored in tanks, what is done with it, and copies of manifests.
- 5) Page 8. Is there anything we should ask about the reference to "wash water wastes."



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION 5**

77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: DuPont Information Request

FROM: Rodger Field, ORC

TO:

Duponters

Attached please find a draft of the long-anticipated DuPont information request. This includes questions from both RCRA and the Water Division. There may be additional questions which should be included based on recent information. If so, please provide them to me as soon as possible (i.e. by October 14 if possible). If I have any additional questions by the 14th, I will incorporate them and endeavor to have this out the following week.

Also, in response to various discussions I have had and memos from Bob Tolpa, and Vacys Saulys, I propose an internal meeting on October at 9:30 to review where we stand and determine the next steps in approaching DuPont. I will arrange a meeting room. Please let me know whether you can attend (at 6-6851). If the time is inconvenient, please provide alternative times and I will rearrange.

One item which we will have to discuss is the proposed meeting with DuPont on November 3. Personally, I would like to postpone this meeting until after we receive the response to the information request and therefore have a better sense of the enforcement handle we have on this facility. If this is not possible, we should discuss the nature of our participation in the meeting.

Thank you for your attention.

Addressees

Bob Tolpa, WQ-16J Vacys Saulys, HSE-5J Jim Novak, WCC-15J Fred Micke, HSRL-6J
Bill Tong, WCC-15J Thad Slaughter, HSRW-6J

cc: Mike Mikulka, WCC-15J Jim Filippini, WCC-15J Joe Malek, HSM-5J

# DRAFT

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. E. F. Hartstein, Facility Manager E.I. DuPont Company 5215 Kennedy Avenue East Chicago, Indiana 46312

Re: Request for Information Pursuant to Section 104(e) of CERCLA and Section 3007 of RCRA for E.I. DuPont de Nemours and Co., Inc.

Dear Mr. Hartstein:

The United States Environmental Protection Agency (U.S. EPA) is currently investigating the source, extent and nature of the release of hazardous substances, pollutants or contaminants, on, at, or about the E.I. DuPont facility in East Chicago (hereinafter referred to as "the Site"). This investigation requires inquiry into the generation, storage, treatment, and disposal of such substances that have been released at the Site. A previous request for information was sent E.I. DuPont on or about September 13, 1991. A response was received by U.S. EPA on or about November 22, 1991. This request seeks additional and supplemental information which is required as part of U.S. EPA's ongoing investigation.

Pursuant to the authority of Section 104(e) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9604(e), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499 and Section 3007 of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6927, you are hereby requested to respond to the Information Request enclosed. Compliance with the enclosed Information Request is mandatory. Failure to respond fully and truthfully to each and every Information Request within twenty (20) days of receipt of this letter, or to adequately justify such failure to respond, can result in enforcement action by U.S. EPA pursuant to Section 104(e)(5) of CERCLA which, as amended, authorizes the United States to seek penalties from a Federal Court of up to twenty-five thousand dollars (\$25,000) for each day of continued non-compliance. "Non-compliance" is considered by U.S. EPA to be not only failure to respond to the Requests but also failure to respond completely and truthfully to each Request. Please be further advised that provision of false,

fictitious, or fraudulent statements or representations may subject you to criminal penalties of up to ten thousand dollars (\$10,000) or up to five (5) years of imprisonment or both under 18 U.S.C. Section 1001. The U.S. EPA has the authority to use the information requested herein in an administrative, civil or criminal action.

This Information Request is directed to your company, its officers, directors and employees, and its subsidiaries, divisions, facilities and their officers, directors and employees. This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. Section 3501, et seq.

Your response to this Information Request should be mailed to:

Rodger C. Field Associate Regional Counsel Office of Regional Counsel 111 West Jackson Chicago, Illinois 60604

Please direct any questions you may have to Rodger C. Field at (312) 886-6851.

Due to the seriousness of the problem at the Site and the legal ramifications of your failure to respond promptly and properly, U.S. EPA strongly encourages you to give this matter your immediate attention and to respond to these Information Requests within the time specified above.

Thank you for your cooperation in this matter.

Sincerely,

Gail C. Ginsberg Regional Counsel

Enclosure

bcc: Jim Novack, WD

Thad Slaughter, Office of RCRA, WMD

Fred Micke, Office of Superfund, WMD

Vacys Saulys, Office of Superfund, WMD

#### INSTRUCTIONS

- 1. A separate response must be made to each of the questions set forth in this Information Request.
- 2. Precede each answer with the number of the Information Request to which it corresponds.
- 3. In answering each Information Request, identify all contributing sources of information.
- 4. If information not known or not available to the Respondent as of the date of submission of its response should later become known or available, Respondent must supplement its response to U.S. EPA. Moreover, should the Respondent find, at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, respondent must notify U.S. EPA as soon as possible.
- 5. For each document produced in response to this request for Information, indicate on the document, or in some other reasonable manner, the number of the question to which it responds.
- 6. You must respond to the Information Request on the basis of all information and documents in your possession, custody or control or in the possession, custody or control of your former or current employees, agents, servants, contractors or attorneys. Furnish such information as is available to you, regardless of whether or not it is based on personal knowledge, and regardless of source.
- 7. Your response should be accompanied by a notarized affidavit from a responsible company official or representative stating that a diligent record search has been completed and that there has been a diligent interviewing process with all present and former employees who may have knowledge of the operations, hazardous substance use, storage, treatment, releases, spills, disposal or handling practices of the Respondent between June 1, 1992, and the date of this letter. To the extent that any information you provide relating to this Request is based on your personal knowledge, or the personal knowledge of your employees, agents, or their representatives, this information shall be in the form of a notarized affidavit.
- 8. If any documents requested herein have been transferred voluntarily or involuntarily to others or have been otherwise disposed of, identify each such document, identify the person to whom it was transferred, describe the circumstances surrounding such transfer or other disposition, and state the date or approximate date of such transfer or other disposition.

The information requested herein must be provided 9. notwithstanding its possible characterization as confidential information or trade secrets. You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 C.F.R. Information covered by such a claim will be disclosed 2.203(b). by U.S. EPA only to the extent, and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. [See 41 Federal Register 36902 et seq. (September 1, 1976); 43 Federal Register 4000 et seq. (December 18, 1985)]. If no such claim accompanies the information when it is received by U.S. EPA it may be made available to the public by U.S. EPA without further notice to you. You should read carefully the above-cited regulations, together with the standards set forth in Section 104(e)(7) of CERCLA, before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim, as stated in Section 104(e)(7)(ii) of CERCLA.

#### **DEFINITIONS**

For the purpose of the Instructions and Requests for Information set forth herein, the following definitions shall apply:

- 1. The term "you" or "E.I. Dupont" (hereinafter "DuPont") shall mean E.I. Dupont Company, its subsidiaries, its officers, managers, employees, contractors, trustees, predecessors, successors, assigns, subsidiaries, and agents.
- 2. The term "person" as used herein includes, in the plural as well as the singular, any natural person, firm, contractor, unincorporated association, partnership, corporation, trust or governmental entity, unless the context indicates otherwise.
- 3. "The Site" or "the Facility" shall mean and include the entire property on or about 5215 Kennedy avenue on the West and adjacent to the Grand Calumet River.
- 4. The terms "furnish", "describe", or "indicate" shall mean turning over to U.S. EPA either original or duplicate copies of the requested information in the possession, custody, or control of the Respondent. Where specific information has not been memorialized in any document but is nonetheless responsive to an information request, you must respond to the request with a written response. If such requested information is not in your possession, custody, or control then indicate where such information or documents may be obtained.
- 5. The term "identify" means, with respect to a natural person, to set forth his full name, present or last known business address, the name of that employer and a description of the job responsibilities of such person.

- 6. The term "identify" means, with respect to a corporation, partnership, business trust or other association or business entity (including a sole proprietorship) to set forth its full name, address, legal form (e.g. corporation, partnership, etc.) organization, if any, and a brief description of its business.
- 7. The term "identify" means, with respect to a document, to provide its customary business description, its date, its number if any (invoice or purchase order number), the identity of the author, addressor, addressee and/or recipient, and the substance of the subject matter.
- As used here, "document" and "documents" shall include writings of any kind, formal or informal, whether or not wholly or partially in handwriting (including by the way of illustration and not by way of limitation), any invoice, receipt, endorsement, check, bank draft, canceled check, deposit slip, withdrawal slip, order, correspondence, record book, minutes, memorandum of telephone and other conversations including meetings, agreements, and the like, diary, calendar, desk pad, scrap book, notebook, bulletin, circular, form, pamphlet, statement, journal, postcard, letter, telegram, telex, report, notice, message, analysis, comparison, graph, chart, paper or electronic recordings from any transportation monitoring device, interoffice or intraoffice communications, photostat or other copy of any documents, microfilm or other film record, any photograph, sound recording on any type of device, any punch card, disc, or disc pack; and any tape or other type of memory generally associated with computers and data processing (together with the programming instructions and other written material necessary to use such punch card, disc or disc pack, tape or other type of memory and together with printouts of such punch card, disc or disc pack, video tape or other type of memory); including (a) every copy of each document which is not an exact duplicate of a document which is produced, (b) every copy which has any writing, figure or notation, annotation or the like of it, (c) drafts, (d) attachments to or enclosures with any documents and (e) every document referred to in any other document.
- 9. "And" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of these Information Requests any information which might otherwise be construed to be outside their scope.
- 10. The term "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.
- 11. The term "Disposal" means the discharge, deposition, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or

discharged into any waters, including groundwaters, as defined in 329 IAC 3-1-7 and 40 CFR 260.10.

- 12. The term "Hazardous waste" means a hazardous waste as defined in 329 IAC 3-6-1 and 3-1-7 and 40 CFR 261.3 and 260.10.
- 13. The term "Solid Waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from the industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923), as defined in Section 1004 of the Solid Waste Disposal Act, as amended.
- 14. The term "Storage" means the holding of hazardous or nonhazardous solid waste for a temporary period, at the end of which the solid waste is treated, disposed of, or stored elsewhere.
- 15. The term "Tank" means a stationary device, designed to contain an accumulation of solid waste.
- 16. The term "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character, or composition of any solid waste.

#### REQUESTS

- 1. Identify all persons consulted in the preparation of the answers to this Information Request.
- 2. Identify all documents consulted, examined, or referred to in the preparation of the answers to this Request and provide copies of all such documents.
- 3. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons including each person's mailing address, occupation and employer.
- 4. Describe all activities at the Site since 1980 which have involved the total or partial demolition of facility structures, process sewers, buildings, tanks or containers or

have involved the disposition of material after 1980 from the demolition of such structures, buildings, tanks or containers which occurred before 1980. Your answer for each such activity should include, but is not limited to, the following:

- a) Describe the location, size and the history of prior uses of the structure, process sewer, building, tank or container which was wholly or partially demolished and the date of demolition;
- b) Describe the nature and quantity of the debris and other hazardous and nonhazardous solid waste which was generated from each demolition activity;
- c) Describe the movement, storage, and subsequent disposal or disposition of all debris and other hazardous or nonhazardous solid waste which was generated from demolition activity. Your answer should be separately stated for each structure, process sewer, building, tanks or container and should include dates.
- d) State whether soil under or adjacent to any structure, process sewer, building, tanks or container was excavated, moved stored or disposed of in connection with each demolition activity. If so, please provide the information requested in subsection b) and c), above, for all such soil.
- e) Provide a detailed description of the methods and devices used to store or treat any debris and other hazardous and nonhazardous solid waste (including soil and water) resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates on which such storage occurred from 1980 to the present. Specify whether said debris and other hazardous and nonhazardous waste was stored in containers, tanks, surface impoundment, landfills, or piles.
- f) Provide copies of all tests, analyses, analytical results, manifests, or any other document containing data about any debris or other hazardous or nonhazardous waste (including soil and water) resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.
- g) Provide date(s) of shipment and the name and address of any person or place to whom any debris or other hazardous or nonhazardous solid waste resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from 1980 to the present.
- 5. Describe all activities associated with the generation, storage, treatment or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Units #2, 8, 4, 13 and 29, as referenced in CH2M Hill's Phase I Groundwater Assessment Report, dated February 22, 1992 for the East Chicago Facility,

from 1980 to the present. Your answer should set forth each unit separately and should be cross-referenced with the general information provided in CH<sub>2</sub>M Hill's Phase I Report. Your answer should include, but not be limited to, the following:

- a) Provide a detailed description of the size, location and historical use of each unit.
- b) Describe all hazardous or nonhazardous solid wastes stored, treated, or disposed from 1980 to the present in each unit, including the nature, quantity and dates of such storage, treatment or disposal.
- c) Provide a detailed description of the nature, quantity, and date(s) that any hazardous or nonhazardous solid wastes was removed from each unit from 1980 to the present, including disposition of waste which was removed and the date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped.
- d) Describe all operation and maintenance or other oversight activities undertaken with respect to each unit from 1980 to the present.
- e) Describe any treatment conducted on any hazardous or nonhazardous solid waste in each unit from 1980 to the present
- 6. Do you presently or have you ever discharged wastewater from the facility to the East Chicago Sanitary District treatment plant. If so, describe all process water which was discharged, including the duration of the discharge, type of process water etc.
- 7. For each groundwater seep which presently exists or has previously been known to exist at the facility, describe the daily maximum flow for the period such seep is known to have existed.
- 8. Provide all documents which relate to the information requested in the preceding questions. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).



LEGAL Wilmington, Delaware 19898

January 28, 1993

#### VIA OVERNIGHT MAIL

Joseph A. Malek
Superfund Program Management
Branch (HSM-5J)
U. S. EPA
77 West Jackson Street
Chicago, IL 60604

Re:

Supplemental § 104(e) CERCLA Information Request

Du Pont East Chicago Indiana Plant

Dear Mr. Malek:

IND 005 174 354

In accordance with our agreement to provide the Agency with Du Pont's response to EPA's Supplemental Information Request of October 1, 1992, I have enclosed the following:

- 1. Du Pont's narrative 20 page response to the EPA Supplemental CERCLA § 104(e) Request for Information dated October 1, 1992; and
- 2. Copies of responsive Du Pont documents, each containing a Du Pont identification number for our own control purposes.

You will also note that Du Pont has asserted claims of confidentiality over some of the enclosed documents by appropriately stamping each page of such material and setting it aside in a sealed manila envelope stamped accordingly with the provisions of 18 USC § 1905 and we assume that you will take the necessary precaution to maintain the proprietary nature of that information.

Thank you for your cooperation and if you have any further questions, please contact me at (302) 773-0149.

Yours truly,

Steven A. Coppola

# Response of E. I. du Pont de Nemours and Company ("Du Pont") to Supplemental CERCLA §104(e) Request for Information (10/1/92) - Du Pont East Chicago Plant

January 28, 1993

1. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal or hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, ditches, outfalls, to also include demolition or removal of buildings anywhere on the site, as referenced in the Phase I Report, buildings, tanks or containers and to the subsequent disposition of all residues, contaminated soil, water, or other debris resulting from the cleanup from the demolition and removal of facility structures, process sewers, ditches, outfalls, buildings, tanks, or containers from 1980 to the present. Such documents include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined by 329 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

#### Du Pont Response:

This response contains all the information Du Pont was able to locate concerning the demolition of buildings at its East Chicago plant. This answer is also the response for Questions 1 through 9. Du Pont has located the following documents which respond to portions of Questions No. 1 and No. 9. See Documents DEC 0010001-001 through DEC 0010025-006 and DEC 00176-001 to DEC 0010081-012. Du Pont has been unable to locate a document summarizing the buildings that have been demolished since 1980 or any records that indicate whether the bricks from these buildings were either buried in place or landfilled on site. Information is based on the recollection of plant personnel who recall that most brick from demolition was landfilled in WMU 2. To the best of the plant's knowledge, some of the brick was used to fill in low spot areas. Examples of this include the brick from the demolition of the Sulfuric building, which was placed in the HCl neutralization pit, the brick from the AgChem building, which was placed in the Chrome Lagoon (WMU 13), the brick from the Main Office Building, which was placed in the river water intake canal of W001.

Plant personnel also recall that outside contractors were retained to dismantle the steel and equipment located within each building. The steel from the dismantlement was generally given to the contractors as partial compensation as per the negotiated contract. Any raw material contained in tanks was utilized on site until the tank was emptied. Finished product in storage tanks was sold to customers. Both the process and storage tanks were cleaned by first neutralizing any residues and then treating this material through the environmental control facility. The tanks would then be cut into smaller pieces and sold as scrap to an outside contractor. Underground storage tanks

were buried in place and then filled with pea gravel prior to 1985. After 1985, all operating USTs that were not closed were removed.

2. Identify and provide a detailed description of any and all of the locations from which the hazardous and nonhazardous solid waste from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers were generated, stored, treated, or disposed from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

3. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes from the demolition or removal of facility structures, process sewers, buildings, tanks, and containers which were generated, stored, treated, or disposed from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

4. Identify and provide a detailed description of the nature, quantity and date(s) the hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks or containers were generated and removed at or from the facility from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

5. Identify and provide a detailed description of the activities undertaken in the generation of hazardous or nonhazardous solid wastes from the demolition and removal of facility structures, process sewers, buildings, tanks, or containers, including the date upon which each activity occurred from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

6. Identify and provide a detailed description of the methods and devices used to store or treat any residue or contaminated soil, water, or other debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers, including the dates upon which such storage occurred from 1980 to the present. Specify whether said residues, soil, debris, etc., were stored in containers, tanks, surface impoundment, landfills, or piles.

See Answer to Response No. 1.

7. Describe any treatment conducted on any residue, contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

8. Identify and provide copies of all tests, analyses, analytical results, manifests, or any other document containing data related to any residue or contaminated soil, water, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

9. Provide date(s) of shipment and identify the name and address of any person or place to whom any residue or contaminated water, soil, or debris resulting from the demolition or removal of facility structures, process sewers, buildings, tanks, or containers was shipped from 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 1.

10. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal of hazardous or nonhazardous solid wastes within or from Waste Management Unit # 2, 4, 8, 13, 29 as referenced in Phase I Report, from 1980 to the present. Such documents include, but are not limited to, manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale, or disposal of solid and/or hazardous wastes as defined in 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

10 - 13: See documents numbered DEC0010026-001 to DEC0010045-002 as responsive to Questions 10 through 15 for WMU 4 and 2. Du Pont did not locate any documents that referred to WMU 8, 13, and 29.

Du Pont discloses the following information for WMU 2, 4, 8, 13 and 29. In addition, see the CH2M Hill Phase 1 Report.

WMU #2 - WMU 2 resulted in layers due to plant practice. WMU 2 includes WMUs 5, 14, 15, 16 and 35 as illustrated in the Phase 1 Report supplied to EPA in Du Pont's initial response. This area first consisted of approximately 15 acres of plant property and has now expanded to approximated 30 acres of land. The plant discarded various substances in this area some of which included general plant trash, zinc muds, glass, brick and some stainless steel materials. It has been estimated that a thousand (based on air permit) AgChem drums were disposed of by first creating "waste pits" and then incinerating the contents during the mid 1970s. The plant leveled the dump in 1972 and covered the vicinity with dirt.

what it is rated

As a result of the 1972 Consent Decree the plant began to landfill the environmental control filter cakes on top of this old rubble area. This substance is generated from the Ludox® process presently in operation at his date. This is the only material that is being disposed in WMU 14 to date.

WMU #4 - This WMU consists of four areas. The first area is the "Diked Steel Storage Tank" which the plant utilized for the storage of untreated hexane and toluene material, This material was shipped off-site for disposal. The second area, consists of the AgChem Drum Storage Area. These drums were placed on an asphalt pad in the early 1980s. The third, was the Reagent Drum Storage Area. These drums were stored on a gravel pad in the early 1980s. A number of these drums were off-spec product that was returned by various customers. The fourth area is active and consists of three 30,000 gallon, above ground weak acid tanks. All acid is presently consumed as a reactant in the EVC process.

WMU #8 - This area has not been used since 1977 as indicated in the Phase 1
Report.

Demarks define during winter 1966 - 87.

WMU #13 - This area has not been used since 1977 as indicated in the CH2M Hill Phase 1 Report.

WMU #29 - The Sulfamic Acid Pits are "acid-brick" pits mortared with mastic that was used for spill control containment. The area consists of two 20' x 20' x 15' impermeable areas. Sulfamic acid, which contained 10-15% nitrogen, was collected in one pit and then overflowed into the adjacent pit prior to controlled discharge into the outfall in order to avoid exceedances (for nitrogen) of the plant's NPDES permit. The

pits were first installed in the early 1970s and were filled in with some rubble material around 1986 or 1987.

11. Identify and provide a detailed description of the Waste Management Unit #2, 4, 8, 13, 29 from which the hazardous and nonhazardous solid waste was generated, stored, treated, or disposed form 1980 to the present.

#### Du Pont Response:

See Answer to Response No. 10.

12. Identify and provide all documents and records which identify the hazardous or nonhazardous solid wastes generated, stored, treated, or disposed from 1980 to the present from Waste Management Unit # 2, 4, 8, 13, 29.

### Du Pont Response:

See Answer to Response No. 10.

13. Identify and provide a detailed description of the nature, quantity, and date(s) the hazardous or nonhazardous solid wastes were managed in Waste Management Unit # 2, 4, 8, 13, 29 and removed at or from the facility from 1980 to the present.

### Du Pont Response:

See Answer to Response No. 10. Du Pont was unable to locate any documents that provide quantities of waste that were managed in WMU # 2, 4, 8, 13, 29. All responsive documents that were found are being submitted as noted in Response No. 10. Manifests were maintained for shipments off-site for WMU # 4, but were destroyed after three years as per Federal Regulations.

14. Describe any treatment conducted on any hazardous or nonhazardous solid waste in the Waste Management Unit #4 from 1980 to the present.

# Du Pont Response:

None.

15. Provide date(s) of shipment and the name and address of any person or place to whom any hazardous or nonhazardous solid waste was shipped from 1980 to the present from the Waste Management Unit # 2, 4, 8, 13, 29.

There have been no shipments of hazardous or nonhazardous waste from any of the WMUs except for WMU #2. WMU #2 also contains WMU #16 which was the PCB Storage Area. For a further explanation of this area see Response No. 44. In addition, see Response No. 13.

16. Identify and provide a copy of all documents which relate to the activities associated with the generation, storage, or disposal or hazardous or nonhazardous solid wastes being generated, treated, stored, or disposed from or at the facility, including but not limited to, waste presently being placed in Waste Management Unit #5, from 1980 to the present. Such document include but are not limited to manifests; waste analysis plans; flow diagrams; and documents regarding the generation, treatment, storage, type of storage device, transport, reclamation, recycling, sale or disposal of solid and/or hazardous wastes as defined by 329 IAC 3-5-1 and 3-6-1 (40 CFR 261.2 and 261.3).

#### Du Pont Response:

WMU #5 is encompassed in WMU #2. WMU #5 was used by the plant to landfill calcium silicate filter cakes and was closed in the early 1980s. Please see Documents DEC0010026-001 to DEC0010045-002 and answers provided in Response to Questions Nos. 10 through 15. Du Pont also makes reference to the CH2M Hill Phase 1 Report.

# 17. Provide the following certification before executing the response

"I certify under the penalty of law that I have personally examined and am familiar with the Information Request and request for documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

### Du Pont Response:

Du Pont would like EPA to cite the section of CERCLA § 104(e) that requires a respondent to certify its responses. EPA's own guidance documents which do not have the effect of law require an affidavit if a respondent fails to respond at all. Du Pont does not fit in that category. If you provide us with the statutory or regulatory authority for this request and the certification language is modified to reflect the fact

that the signor has not personally examined each and every documents, we will provide the Agency with an appropriate certification.

18. Furnish the name and last known address of the suppliers of organic and inorganic chemicals or solvents for the period of time that you have occupied the premises to and including 1990, and in the event that such chemicals were supplied by an affiliate or division of E. I. du Pont, then in that event identify in each instance the trade name or chemical composition of any such chemical or solvent.

#### Du Pont Response:

Due to Du Pont's Records Retention Program, it no longer has copies of all vendors that supplied organic and inorganic chemicals to the plant. All documents that were found are being produced. See Documents DEC0010046-001 to DEC0010075-004. Du Pont also refers to its 104 (e) Response dated November 22, 1991, Response No. 2.

19. Furnish any and all aerial photographs of your facility or any portion thereof and identify the year that the photo tends to depict the area photographed.

#### Du Pont Response:

See Documents DEC0010171-001 to DEC0010225-001 and DEC0010994-001 to DEC0010996.

20. Furnish copies of any and all local, state and federal permits granted or issued with reference to the operations of any portion of the facility or the use, construction, transportation, removal, storage of any chemical, substance or solvent or facility built, erected, or placed upon the property to contain, house, confine or process any such chemical, substance or solvents.

#### Du Pont Response:

See Documents DEC0010082-001 to DEC0010126-001. In addition, see Du Pont's November 22, 1991, 104(e) Response to Question No. 7.

- 21. With reference to Table 3-1 of CH2M HILL's Phase I Groundwater Assessment Report, does E. I. du Pont, its contractors or attorneys possess any record, document, report or any other writing
  - A. More descriptive of any waste unit's contents other than those disclosed within the column of the table labeled "Possible Contents"

B. Descriptive of any quantity received by any waste unit other than those disclosed within the right column of the table?

#### Du Pont Response:

Table 3-1 of CH2M Hill's Phase 1 Groundwater Assessment Report was a review of relevant documents from the East Chicago plant and interviews with plant employees. See documents supplied in Response to Question Nos. 10 through 16 as well as Documents DEC0010127-001 to DEC0020170-002.

22. If either or both of the preceding paragraphs are answered in the affirmative, furnish all such records, documents, reports or writings.

#### Du Pont Response:

See Answer to Response No. 21.

23. Do you possess any information or knowledge that the site may have had other Waste Management Units other than those which are identified within Table 3-1?

#### Du Pont Response:

Yes.

24. If the preceding question is answered in the affirmative, state the facts or basis of such information or knowledge.

#### Du Pont Response:

An area along the south side of the north roadway located south of WMU 1 was used as a burial ground for lead arsenate sludge generated in the AgChem Production Area. It was sluiced in a long trench and then covered with soil in the early 1950s. The exact quantities of lead arsenate disposed in this area is unknown. We have found no documents relating to this event.

25. Were any of the wastes or products from any of the thirty-six Waste Management Units or from those units identified in your response to Paragraph 23 disposed or discarded either by dumping such waste into, in, upon or adjacent to the Grand Calumet River?

Yes.

26. If yes, describe such waste or waste products, its quantity, the year such disposal commenced and the year it may have ended. In addition, furnish process flow charts descriptive of or explaining the resulting waste or waste product.

#### Du Pont Response:

To the best of Du Pont's knowledge and belief, WMU Nos. 13 (Chrome Lagoon) and 36 (Outfall No. 2) emptied directly into the Grand Calumet River. For further explanation regarding the possible waste that may have been discharged into the Grand Calumet please see the CH2M Hill Phase 1 Report supplied in Du Pont's November 22, 1991 104(e) Response. We have been unable to locate any other documents which set forth the types and quantities of waste.

27. Do you possess or does someone else possess the results of any analytical chemical tests of the soil, water or air above, under, at or near any of the waste management units identified in either Paragraph 21 or 23 above?

#### Du Pont Response:

Yes.

- 28. If the preceding question is answered in the affirmative, please
  - A. Furnish the name and address of each contractor or third party that may have conducted any such test, or participated in the analysis and the date of such test. If either a contractor or third person participated in such testing or analysis furnish such contractor's or third persons' name and address. If any test or analysis was undertaken by or participated in by a former employee, furnish the name and last known address of any such employee or employees, and
  - B. Furnish copies of all such tests and analysis.

# Du Pont Response:

- A. The identifying information is contained on the reports.
- B. See Documents DEC0010255-001 to DEC 0010448-017. In addition, see Response to Question No. 33 and the CH2M Hill Phase 1 and 2 Reports.

# 29. Please furnish copies of each of the following documents references in CH2M HILL's report within Appendix A:

Document No.	<b>Document Description</b>
C-P-8C	Letter from EPA to U. S. Atty re waste constituents for Du Pont's discharges into the Grand Calumet River
C-P-8L	Plant environmental history
E-P-21A	Plant lifetime production record
E-P-25A	Process and storm sewers map
E-P-25B	Waste process waste outfall
E-P-25E	Plant outfalls into the Grand Calumet River
E-P-501L	Inventory of oil wastes from
	transformers
E-W-552Z	Plant discharges to river
E-W-554F	Waste disposal on land

#### Du Pont Response:

CH2M Hill has designated Document No. C-P-8C as "missing" from the files. "Missing" was defined as being referenced in another report received by CH2M Hill but the actual document was never seen in the plant's files. See Documents DEC0010449-001 to DEC0010457-002 in response to the other documents.

30. At any time did Du Pont dredge any material from the Grand Calumet River or its banks at or adjacent to the site?

#### Du Pont Response:

Yes.

- 31. If the preceding question is answered in the affirmative, please
  - A. Explain the reason, purpose or circumstance for any dredging operation,
  - B. Describe when any dredging took place, the portion of the river then involved, and where dredged material was disposed or stored,
  - C. Describe what was done to or with the dredged material, and
  - D. Furnish copies of all analytical or chemical tests or reports conducted on such dredged material.

The East Chicago plant was required by the November 14, 1972 Consent Decree to consolidate thirteen existing outfalls into three. In order to meet this requirement, the plant was required to construct two 24 inch discharge pipes. About 8 cubic yards of river bottom was removed during construction of which about 6 cubic yards was replaced as backfill around the pipes to restore the bottom to its original level. As an additional requirement of the 1972 Consent Decree, the plant was required to dredge approximately 500 cubic yards of sediment from the bottom of the Grand Calumet River. The dredged area was 150 feet in length, seven feet in depth and extended approximately 25 feet into the river. The dredged material was disposed on the plant in WMU #5. Although it was proposed that the dredged material be used for roadway improvement, this was never implemented due to the consistency of the material. The dredging operation was completed on September 14, 1973. See Documents DEC0010458-001 to DEC0010464-001.

32. Furnish a copy of the lease between Du Pont and Purdue University entered into during 1974, copies of all correspondence between the parties or their agents concerning that lease or correspondence concerning the University's findings. This lease is mentioned at paragraph 3 of your Response to a Section 104e Information Request dated November 22, 1991.

#### Du Pont Response:

See Documents DEC0010465-001 to DEC0010476-001.

On page 3-2 of CH2M HILL's Phase I report the statement is made that "Handling methods for the (production) wastes have changed dramatically in the 96 years of operation. Originally, plant wastes were discharged directly into the Grand Calumet River, on site pits, ponds, basins or landfill areas without pretreatment." Identify by name, date, author and descriptive title all reports, documents, writing, maps, plats photos, drawings, records which are in your possession which describe, explain, graphically represent or depict such original discharges and also those which were consulted or examined in preparation for the CH2M HILL report.

# Du Pont Response:

See Documents DEC0010477-001 to DEC0010924-013 and DEC0010997-001 to DEC0011184-003..

34. Before NPDES permits were obtained for the site, describe the chemical contents of all discharged or discarded mud waters or processing waste waters and the means and methods of their disposal. If on site or into the Grand Calumet River identify the place of such disposal and amount thereof. If off site, furnish

the name and address of the transporter, the amount of water, and place to which such discharged or discarded waters were transported.

#### Du Pont Response:

The East Chicago plant disposed of zinc filter press cake or zinc mud from 1909 to 1969 in the area designated as WMU 35. As stated in the CH2M Hill Phase 1 Report, the plant was unable to locate documents describing the waste characteristics or quantities. Some documents that were uncovered state that waste mud from the filtration of aluminum chloride solution was discharged to the river. See Documents DEC0010925-001 to DEC0010925-019.

35. The CH2M HILL Phase I report states, at a number of locations therein, that some information, data and information necessary to prepare the report was obtained by interviewing current or former employees. Furnish the names of all persons so interviewed, describe his or her current or former position with Du Pont, supply the last known address of all former employees or third persons so interviewed and attach copies of all such interviews or reports of such interviews.

#### Du Pont Response:

35. O.J. Meyer

Du Pont employee

Environmental Coordinator

East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312

Arnis Sraders (deceased)

Du Pont retiree

Engineer

Andy Horvat

Du Pont Employee Mechanical Supervisor East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312

John Orban

Du Pont Employee

Research and Lab Director

East Chicago Plant 5215 Kennedy Avenue East Chicago, IN 46312 Brad Kulesza

Du Pont Employee

FSA Sulfuric Acid Production Supervisor (E. Chicago -

1982-1983)

Chestnut Run Plaza

Centre and Faulkland Roads Wilmington, DE 19805

Gregory Behm

Former Du Pont employee.

Supervisor of EVC Area - E. Chicago Plant

Address Unknown

Archie Murrish

Du Pont Retiree.

Sr. Mechanical Engineer (Dismantlements) 5712 Blue Heron, Kalamazoo, Mi 49008

All listed current and former Du Pont employees are represented by counsel, Steven A. Coppola, Esquire (302) 773-0149. Any contact with these individuals should be coordinated through his office.

See Documents DEC0010926-001 to DEC0010927-016.

- 36. Page 3-4 of the CH2M HILL's report in describing WMU 4 states, "This WMU 4 consists of the on site interim storage areas for hazardous wastes. The AgChem drum area contains wastes that were generated in the operation of the AgChem processes." With reference to the statements quoted, please:
  - A. Explain the actual period of time that an AgChem product was stored at such onside location for each product mix formulated by, delivered to or processed by AgChem,
  - B. Describe the type of container used for such product while in the storage area,
  - C. Furnish all photographs in your possession which may depict the storage of such products.
  - D. Furnish the beginning and ending date of the AgChem operation, and
  - E. Furnish process flow charts of each and every chemical or formulation produced, prepared or engineered by the AgChem operation.

# Du Pont Response:

Du Pont was unable to locate any documents responsive to Question 36. All information that was found in Du Pont's files was reported in the CH2M Hill Phase 1 Report.

37. Did E. I. du Pont place any chemical, waste, product, personal property or soil into, upon or at the wetland on its property?

Yes.

- 38. If the preceding question is answered in the affirmative, please:
  - A. Describe the chemical, waste, product or personal property that was so placed and
  - B. Indicate the starting and ending date of such placement.

#### Du Pont Response:

Du Pont has not developed information about the historical location of wetlands on the East Chicago plant property. It is not clear whether any of the 36 WMUs identified in the CH2M Hill Phase1 Report are located in wetland areas. However, Du Pont would speculate that one or more of the 36 WMUs are located in what would be classified as "wetlands." Du Pont has been unable to locate any documents, except for DEC0011185-001, that specify any other waste disposal activity in "wetlands" areas on the plant beyond the documents included in this Supplemental Response.

39. List all the pesticides ever formulated, manufactured, prepared, mixed or processed at the facility furnishing the beginning and ending date of such manufacture, preparation, mixture or processing and the amount of each such pesticide.

#### Du Pont Response:

The East Chicago Plant has not retained all manufacturing records of Du Pont pesticide products. To the best of its knowledge, the only documents remaining referencing production numbers are the 1976 through 1982 U.S. E.P.A. Pesticide Reports for Pesticide Producing Establishments. This information has been supplied below for Lorox®, Turersan®, Tupersan 70®, Karmex®, Ammate X®, Ammate X-Ni®, Ammate Solution®, and Hexazinone Technical for the time period between 1975 and 1981. See Documents DEC0010928-001 to DEC001095-003 as well as those referenced in Response No. 51.

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product
Insecticide Dust Mixtures	April 1936	July 1939	Info. not available
2,4-D Sodium Weed Killer 83%	Feb. 1946	July 1946	Info. not available

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product
"Ammate" X "Ammate" X-Ni	April 1959	January 1978	9,801,000 lbs. 792,000 lbs.
"Ammate" Solution	May 1959	January 1978	433,000 gallons
Anisole	Nov. 1948	Nov. 1949	Info. not available
Barium Fluosilicate	Feb. 1930	Nov. 1943	Info. not available
Benomyl	Oct. 1968	Dec. 1970	Info. not available
"Benlate"	Nov. 1968	Jan. 1971	Info. not available
Bordeaux Mixture	March 1910	Oct. 1940	Info. not available
Calcium Arsenate	March 1919	Aug. 1948	Info. not available
Calcium Arsenite	June 1927	March 1931	Info. not available
"Deenate" 25W	Sept. 1945	Oct. 1946	Info. not available
"Deenate" 50w	Jan. 1946	Oct. 1947	Info. not available
EPN Miticide	Feb. 1950	May 1952	Info, not available
EPN 300 Insecticide	March 1950	June 1952	Info. not available
EPN 45% Emulsifiable	July 1952	April 1953	Info. not available
Fenuron	August 1964	Sept. 1964	Info. not available
Garden and Potato Dust	March 1944	Dec. 1944	Info. not available
"Karmex"	1970s	1970s	6,140,029 lbs.
Lead Arsenate Phenothiazine Mixtures	March 1946	March 1947	Info. not available

Product	Began Operation	Discontinued Operation	Approximate Quantity of Product
Lead Arsenate Insecticide	March 1910	April 1949	Info. not available
Lime Sulfur Solution	March 1910	April 1949	Info. not available
Linuron	March 1964	May 1972	Info. not available
"Lorox"	Jan. 1963	Nov. 1981	41,281,734 lbs.
Siduron	Nov. 1964	Nov. 1981	Info. not available
Methoxychlor	Jan. 1947	Nov. 1949	Info. not available
"Marlate" 50	Aug. 1947	Sept. 1949	Info. not available
Methoxychlor Concentrate 80%	March 1949	March 1949	Info. not available
"Tupersan" "Tupersan 70"	Nov. 1964	Nov. 1981	1,333,574 lbs. 1,249,790 lbs.
Velpar Intermediate (hexazinone technic	Dec. 1974 al)	Jan. 30, 1987	4,708,000 lbs.

40. Has any employee, third party, or government agency ever communicated to E. I. du Pont that someone's death, bodily disease, or adverse health had been or could have been caused wholly or partially by any of the pesticides listed in response to Paragraph 18?

### Du Pont Response:

Du Pont has not been able to locate any documents or other information indicating that its East Chicago plant has had such communication.

41. If "Yes" is supplied in response to the preceding question, then furnish a copy of all such communications if in writing and furnish a verbatim copy of all such oral communications.

Not applicable.

42. CH2M HILL's Phase I report, at Figure 1-2, describes WMU 5, 14, 20 and 29 as still active operations. Describe the waste management practices at each of these units and furnish copies of state, local government and federal permits issued with reference to all these units.

#### Du Pont Response:

The waste management practices at each of these units are fully described to the extent of Du Pont's knowledge in the Phase 1 Report. With respect to WMU #5, see Response to Question No. 16. With respect to WMU #29, see Response to Questions 10-13. WMUs #14 (New Landfill) and #20 (Above-Ground Tank) are still in current use. Included in response to this question is Document DEC0011186-001 to 0011186-010 which is an application to IDEM requesting that landfilling activity at WMU #14 be approved under the then-new state waste management regulations. There are no permits for the above-ground tanks since they are not required by federal or state regulation.

43. When did the Freon Plant cease operations?

#### Du Pont Response:

The East Chicago plant discontinued its Freon® operations in 1977.

44. Do you have any information, reports, data or documents describing the amount of PCBs at any portion of the site or in the adjoining river but adjacent to the site? If so, furnish copies of all such reports, data, and documents.

# Du Pont Response:

See Documents DEC0010951-001 to DEC0010967-001.

45. What year and month did the site first begin discharging its waste water into the East Chicago Sanitary District treatment plant and at what location at the site did such discharge first take place?

### Du Pont Response:

Du Pont has been unable to locate any records responsive to this request. To the best of Mr. Meyer's knowledge Du Pont constructed sanitary sewers when it purchased the site in 1927. Mr. Meyer has no knowledge as to the location of the first discharge point.

47. (sic) What process waters discharged into the East Chicago Sanitary District, if any, and over what period of time did such discharge take place?

#### Du Pont Response:

None.

48. Identify, per seep, its daily maximum flow for all current and former groundwater seeps at the site.

#### Du Pont Response:

The only analytical information developed by Du Pont with respect to river bank seeps occurred in 1991 pursuant to 308 of the Clean Water Act. All of Du Pont's reports are on file with Region V. Nevertheless, see Response to Question No. 33 for copies of said reports.

49. Has the company ever manufactured or produced chemicals, compounds or use processes which contained mercury, nickel or cadmium?

#### Du Pont Response:

To the best of its knowledge, the East Chicago plant has never manufactured or produced chemicals, compounds or used processes which contained mercury or nickel. The East Chicago plant converted sulfuric acid from zinc ore through a roasting and vaporization process. The zinc ores were scrubbed to remove particulate matters. This material, which collected in the scrubber, was then landfilled in an area in WMU 33. Cadmium was an impurity that was contained in this discarded material.

50. Has the company ever manufactured or produced organic pesticides and/or herbicides?

#### Du Pont Response:

Yes.

- 51. If you answered "Yes" to the questions posed in paragraph 49 and/or 50, for one or both paragraphs furnish
  - A. Their chemical and compound name, including its trade name.
  - B. Their chemical composition,
  - C. The location at the premises where they had been manufactured or processed.

51. (a -b) The East Chicago plant no longer has copies of documents that name the chemical name and composition of <u>all</u> pesticides/herbicides that have been produced at the plant. The information that is available has been noted below. In addition, see Response to Question Number 39.

Trade name	Chemical Name	Chemical Composition
Benlate	Benomyl	Methyl 1(Butylcarbamoyl)-2- benzimidazole carbanate
Lorox	Linuron	3-(3,4 dichlorophenyl)-1-Methoxy- 1-Methylurea
Karmex	Diuron	3-(3,4-dichlorphenyl)-1,1 dimethylurea
Velpar	Hexazinone	3-cyclohexyl-6-(Dimethylamino)-1-methyl-1,3,5-triazine -2,4(1H,3H0-dione
Tupersan	Siduron	1-(2-methylcyclohexyl)-3- phenylurea
Ammate X Weed/Brush Killer	Ammonium Sulfamate	

- 51. (c) See Documents DEC0010968-001 to DEC0010974-001.
- 52. (sic) Have any of the chemicals, compounds, pesticides or herbicides been disposed of or discharged at the site?

# Du Pont Response:

Yes.

53. If "Yes" is the answer to the preceding question explain the circumstances, the date, and describe the chemical, compound, pesticide or herbicide and the quantity so disposed or discarded.

As indicated in the CH2M Hill Phase 1 Report, WMU Numbers 4, 15, 22, 28, 32 contain pesticides that were either discarded or stored at the East Chicago plant. There is no documentation that describes the specific waste types or quantities for these WMUs. See CH2M Hill Phase 1 Report for further detail as well as Documents DEC0010975-001 to DEC0010993-009.